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# REPORT

OF THE

## EVIDENCE

IN THE CASE OF

GEO. C. BATES vs. ILL. CENTRAL R. R. Co.

IN THE UNITED STATES CIRCUIT COURT,

FOR THE

NORTHERN DISTRICT OF ILLINOIS.

HON. JOHN McLEAN, PRESIDING JUDGE,

HON. THOMAS DRUMMOND, Associate Judge.

OCTOBER TERM.

GEO. C. BATES,

vs.

ILL. CENTRAL R. R. CO.,

EJECTMENT.

MESSRS. N. C. McLEAN,  
E. C. LARNED,  
J. A. WILLS,  
T. HOYNE,  
S. A. GOODWIN,

FOR PLAINTIFF.

MESSRS. JAS. F. JOY,  
J. M. DOUGLAS,  
D. STUART,  
C. BECKWITH,

FOR DEFENDANTS.

R. R. HITT, REPORTER.

CHICAGO:

DAILY EVENING JOURNAL OFFICE.

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# UNITED STATES CIRCUIT COURT,

FOR THE NORTHERN DISTRICT OF ILLINOIS.

OCTOBER TERM.

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HON. JOHN McLEAN, PRESIDING,

HON. THOMAS DRUMMOND, ASSOCIATE JUDGE,

R. R. HITT, Reporter.

---

GEO. C. BATES,	{	Ejectment.
vs.		
ILL. CENTRAL R. R. CO.		

---

FIRST DAY—WEDNESDAY, NOVEMBER 9th, 1859.

The case of Geo. C. Bates *vs.* Illinois Central R. R. Co. was taken up :

Messrs. N. C. McLean, John A. Wills, E. C. Larned, S. A. Goodwin, and T. Hoyne, appeared for the Plaintiff.

Messrs. Jas. F. Joy, Jno. M. Douglas, David Stuart and C. Beckwith, appeared for the Defendants.

The following Jury were, after some delay in their election, empaneled to try the cause :

O. W. Brewster, Simon Bassett, A. E. Jenner, George Strout, John Edwards, H. L. Crosby, James Dean, S. M. Skinner, J. J. Perry, Frederick Baker, Henry L. Peasley, Lewis Elsworth.

Mr. McLEAN opened the case briefly on behalf of the plaintiff.

Mr. Joy replied, opening the case on behalf of the defendants.

Mr. McLEAN, Counsel for the plaintiff, proceeded to offer the following documentary evidence :

A certified copy of a Township Map of the premises in question, with the field notes attached, made from Rector's Survey in 1821.



Documents proving pre-emption by Robert A. Kinzie, May 7, 1831.

Certificate of the Register and Receiver of the Land Office at Palestine, dated May 7, 1831.

Mr. Joy, for the defendants, objected to the admission of this document ; pending which objection :

Mr. McLEAN offered the Certificate of the Register of the Land Office at Palestine, dated June 13, 1836, by J. Kitchell, with accompanying certificates and an affidavit of Geo. C. Bates.

Mr. Joy objected to this document also, pending which objection :

Mr. McLEAN offered the Patent from the United States to Robert A. Kinzie, dated March 9, 1837, for the lot or North fraction of section 10, in Township 39, North of range 14 East, &c.

Plat of Kinzie's addition to Chicago, dated February 22, 1833, with certificate of the Recorder of Cook County.

Quit Claim Deed from Robert A. Kinzie and wife, to Henry Moore, dated December 16, 1835, quit-claiming and releasing all the right, title and interest in and to "a certain tract or parcel of land, situate in said Chicago and usually called the sand-bar, being all that part of the North fraction of section 10, in Township 39, North of range 14, East of the 3rd principal meridian, which lies South of the piers now being constructed in the harbor of Chicago, and which is not included in the water lots of Kinzie's addition."

Papers in Bankruptcy of Henry Moore, dated Nov. 8, 1842, certificates of appointment of Moses Pritchard, as his assignee, Nov. 8, 1842 ; order of sale, March 28, 1843 ; assignee's sale to Reuben Moore, April 24, 1843.

Will of Reuben Moore to his wife, dated Nov. 15, 1856, proved January 12, 1857, before the Surrogate, New York, certified copy.

Deed and assignment of interest of Anna Maria Moore to Averill and Armstrong, dated May 18, 1857.

Deed of Moses Pritchard, assignee of Henry Moore to Averill and Armstrong, dated May 22, 1857—no deed having been made by him to Reuben Moore, in pursuance of assignee's sale of April 24, 1843.

Mr. Beckwith for the defence, objected to this deed, on the ground that under the Bankrupt Law, the assignee has

no authority to make a deed to any person except the purchaser; pending which objection, Mr. McLean offered

Deed from Averill and Armstrong, to Geo. C. Bates, the plaintiff, dated May 19, 1857.

Deed by Robert A. Kinzie to Ellen M. Wolcott, dated Feb. 26, 1833, conveying water lots No. 26 and 31, on the plat of Kinzie's addition.

Deed of Robert A. Kinzie to David Hunter, dated Feb. 6, 1833, conveying water lots No. 28 and No. 32.

Deed from Ellen M. Wolcott to David Hunter, conveying water lots No. 26 and No. 31, dated May 13, 1833.

Deed from David Hunter and wife to Arthur Bronson, conveying water lots Nos. 26, 28, 31 and 32, dated Nov. 1, 1834.

Deed from Arthur Bronson and wife to Frederick Bronson, conveying water lots Nos. 26, 28, 31 and 32, dated Dec. 1, 1834.

Deed from Frederick Bronson to William B. Ogden conveying water lots No. 26 and No. 28, dated June 30, 1835

Power of Attorney from Wm. B. Ogden to Wm. E. Jones, dated Feb. 8, 1844.

Deed from Wm. B. Ogden, by W. E. Jones, his attorney, to Cyrus H. McCormick, conveying water lots Nos. 26, 27 and 28, dated January 15, 1850.

Quit-Claim Deed of Cyrus H. McCormick to Geo. C. Bates, conveying water lots Nos. 26, 27, 28, 29 and 30 in Kinzie's Addition to Chicago, dated September 5, 1857; conveying that part which lies East of middle of the original channel of the river as it was on the 22 of February, 1833, according to the original legal boundaries of said lots, and South of the middle of the present channel or harbor of Chicago river, &c.

Deed of Robert A. Kinzie to Oliver Newberry, dated March 7, 1833, conveying water lot No. 27.

Deed from Oliver Newberry to Henry King, conveying lot No. 27, dated March 5, 1836.

Certificate of the foreclosure of a mortgage by Arthur Bronson against Henry King and wife on lot No. 27, dated December 13, 1858; command to the Sheriff to sell, dated November 29, 1843, (record incomplete at present,) and Sheriff's deed, February 17th, 1849 to Wm. B. Ogden, lot No. 27.



MR. BECKWITH objected, that an essential part of the proceedings, connected with the foreclosure of this mortgage, were during a term of Court, whose proceedings had been declared a nullity by the Supreme Court, and hence the whole procedure in the case of this foreclosure was void ; pending which objection :

Deed from Robert A. Kinzie to John H. Kinzie, dated June 9, 1835, conveying water lot No. 29.

Deed from John H. Kinzie and wife to the State Bank of Illinois, dated July 15, 1840, conveying water lot No. 29.

Deed from State Bank of Illinois to Jonas C. Clark, dated July 6, 1846, conveying water lot No. 29.

Deed from Jones C. Clark to Lewis W. Clark, dated July 6, 1846, conveying water lot No. 29.

Deed from Lewis W. Clark to Richard Patrick, dated March 25, 1852, conveying the east half of water lot No. 29.

Deed of Emily M. Clark to Richard Patrick, of the east half of water lot No. 29, dated March 21, 1853, (release of dower.)

Deed from Richard Patrick and wife to Cyrus H. McCormick, conveying East half of water lot No. 29, dated March 21, 1853.

Deed from Lewis W. Clark to Cyrus H. McCormick, conveying the east half of water lot No. 29, dated April 4, 1853.

Deed from Lewis W. Clark and wife to Cyrus H. McCormick, conveying the west half of water lot No. 29, dated August 24, 1859.

Deed from Wm. B. Ogden to Cyrus H. McCormick, conveying the west half of water lot No. 29, dated Jan. 15, 1850.

Deed from Robert A. Kinzie to John H. Kinzie, conveying water lot No. 30, dated Feb. 25, 1833.

Quit Claim Deed from John H. Kinzie and wife to Arthur Bronson, conveying lot No. 30, dated July 27, 1842.

Quit Claim Deed of John H. Kinzie and wife to Frederick Bronson, executor of Arthur Bronson, conveying lot No. 30, dated Dec. 27, 1845.

Will of Arthur Bronson, authorizing the executor to sell this lot, dated Oct. 29, 1844; date of Probate Dec. 3, 1844, New York.

Deed from the Executor of A. Bronson to Cyrus H.



McCormick, by Frederick Bronson Executor, conveying water lot No. 30, dated April 1, 1851.

Deed from Arthur Bronson and wife to Frederick Bronson, conveying lots No. 31 and 32, (also 26 and 28); dated Dec. 1, 1834.

Deed from Frederick Bronson to Wm. B. Ogden, conveying lots No. 31 and 32; dated June 24, 1835.

Deed from Wm. B. Ogden to Henry Moore and S. L. Hinckley, conveying water lots No. 31 and 32, dated June 24, 1835.

Mortgage from S. L. Hinckley and Henry Moore to Wm. B. Ogden, dated June 25, 1835, conveying water lots Nos. 31 and 32.

Certificate Copy of the record of foreclosure of above Mortgage.

Sheriff's Deed to Samuel Hinckley, dated November 12, 1840.

The Court, having instructed the Jury to carefully abstain from all outside influence, and especially from reading any articles in the newspapers having reference to the case, adjourned until to-morrow morning, at half-past nine o'clock.

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### THIRD DAY— THURSDAY, NOVEMBER 10th 1859.

Court met at half past 9 o'clock, and jury being called the trial proceeded.

MR. McLEAN offered in evidence, a Deed from Samuel Hinckley to Samuel L. Hinckley, dated Nov. 26, 1839, conveying water lots Nos. 31 and 32 in Kinzie's Addition to Chicago, lying South of the Pier.

Deed from Samuel L. Hinckley and wife to John S. Wright, dated Dec. 3, 1853, for lots No. 31 and 32 of Kinzie's Addition.

Deed from John S. Wright and wife to Geo. C. Bates, dated Oct. 1, 1857.

GURDON S. HUBBARD called by the plaintiff, being duly sworn, was examined in chief by Mr. McLean, and testified as follows :

Q. What time did you come to Chicago? A. I came here in 1818.

Q. [Presenting Map of 1818.] Here is a map made in 1818. I wish you to look at that map in reference to the position of the sand-bar, river, lake, &c., and state whether, according to your recollection, it gives a correct representation of the lake, river and sand-bar, at the time you first came here. A. [Having, examined the map,] I think that is a very correct representation, sir. The representation of that building there, if that is put down for a building, is not correct. It was not there at the time. It is the old AGENCY HOUSE. There was an improvement there, and a commencement of building, but it was not finished until afterwards—some five years afterwards.

Q. Walk around to the jury and explain the map to them. [Witness passes around to the jurors, and points out to them the various localities indicated on the map—the fort, river, sand-bar, burying ground, &c.] Here is where Mrs. Clark's house was, about at the mouth of the river. I have seen the river a little below.

Q. Locate Mrs Clark's house in reference to the present streets. A. I don't remember exactly; I don't know that I could say positively. I suppose it was about here (indicating the position.) There is the old burying ground—here is the Beaubien place—here the factor's house—there was the field or improved grounds of the Fort—that was their farm—here was the U. S. Agency house—here was John Kinzie's house.

Q. The father of the patentee, Robert A. Kinzie? A. Yes sir; there was his barn and ice house. Mr Kinzie's house had a verandah in front. It was a long, log house, with a piazza in front, and sitting in that you could look down and see vessels coming in here; not, I think, all the way; there was a little bend when you lost sight of them; otherwise you could look down clear to the mouth of the river.

Q. You were an Indian Trader? A. Yes sir.

Q. And I suppose had frequent occasion to come up? A. Yes sir; we always came up on this coast.

Q. In what vessels? A. Mackinac batteaux, carrying ten or fifteen tons, five oars. We came around this coast, and came into this mouth represented here. It was the only entrance here. This bar was gradually coming to the South. Every year we found it nearer and nearer South. The sand making way would come down.



Q. The sand bar increased in size ? A. Yes. It run further South. At times it was so low I could come over it without wetting my feet, except for the width of that table, perhaps—so that you could jump across it. That wouldn't remain so long, but an easterly gale would bank it up, and it would remain almost so.

Q. Was there any time when there was no water there at all ? A. Yes sir. I think there was one fall that there was no water there at all, or, if any, very little, so that you could see the water apparently under the surface of the sand.

Q. At that time when there was so little water, was there any other entrance from the Chicago river into the lake ? A. No sir, but at that time the mouth was down here at the Pine, sat the Massacre Pines.(?) We called them "the Pines." A few of them I think now remain below Mrs. Clark's house.

Q. State what was the condition of this sand-bar as to being firm and dry at the time you came here in 1818, and how it remained ? A. I found this sand-bar perfectly dry and firm, and attached to this north section. There was no intervening water between here and the mouth of the river at that time. This was high and little hillocks—something in that shape [showing with his hands] made by the wind catching it up. After the sea receded, the winds turned it around and caught the sand, making quite little mounds, five or six or eight feet high. In a very heavy gale of wind sometimes the water would go over in places. It would strike here and heave over into the river. It never rolled over here but so that you could pass during the gale. After the pier there was such a time.

Q. But before the Pier ? A. No sir. There were very high sand hills made by the wind ; afterwards in 1837-8 they were cut down level.

Q. This was a Military Post ? A. Yes sir.

Q. Do you remember any amusements the officers and men used to have at that time, in connection with this sand-bar ? A. Yes sir.

Q. State what that amusement was, and how it was conducted ? A. The amusements at that time, in the fall, were generally hunting deer, wolves, turkeys and foxes. The principal sport was hunting foxes, from the time Capt. or Lieut. Scott came here.



Q. Was he the coon man? A. Yes sir; of coon notoriety. He introduced the sport of hunting foxes. Originally, foxes were rather common in that day. Down in the oak woods his dogs would run the foxes until they burrowed them. He would then dig them out and bring them up to the fort and feed them; and for amusement we would station ourselves across this bar at the upper part, where the bed of the river is, turn the foxes loose, and let the hounds after them, and the foxes ran down, come up here and then across again, and so that would follow on.

THE COURT. You would see fair play? A. Yes sir; when we found the dogs were about to catch them, and we had sport enough, we would catch the foxes and the dogs, and put the foxes in the yard again; but very often the foxes would die, and we would have to get new ones.

Q. Was there ground to have pretty good sport? A. Yes sir; it gave a run of over a mile around—I should think fully a mile.

Q. Did they sometimes catch the foxes? A. Yes sir; sometimes they caught the foxes. They would always catch the foxes, unless taken off before the foxes were tired down. We let the dogs run along.

Q. What was the width of that bar? A. Well, sir, I think there were places at this end, the upper end, the north end, at the bend of the river, where it was five or six hundred feet wide—perhaps more. My own impression is, it was wider. As you went down, it was narrower. There were times it was wider. That shore varied very much with the winds. Sometimes it was not quite so straight a line as represented here, and occasionally depressions in this sand-bar—lower at one point than others.

Q. What was the height of the bar above the water? A. From three to eight feet—perhaps ten feet. There might have been times when there was fifteen feet. It was from three to eight feet above the water. It was uneven. It was high at some places, and some places low. It depended on the winds. There were knobs upon it occasioned by the drift, and it caught on it, and occasionally bushes, particularly up at the end here.

Q. Did it run in a bluff bank to the lake, or taper (?) A. No sir, it tapered off on both sides to the river and the lake.

Q. Little bushes were growing on the north end. A.

Yes sir ; the bushes were along about the bend of the river, at the broadest part. They were thin, little juniper bushes—little willows.

Q. You have lived in Chicago ever since ? A. No sir : I was not here as a permanent resident until 1834. I was here every spring and fall, and part of the summer, every year. I was residing the first thirteen years in the interior during the winter season. Then, in May, until October and November, I was here and at Mackinaw, on the lakes.

Q. Bring your recollection down, and tell us of any changes you have noticed in it, down to 1831 ; in reference to the mouth of the river ? A. The river ran down here a good distance, and, in consequence of becoming very shallow, boats drawing eighteen inches of water would ground, and it became very difficult to enter up the river, and that difficulty was increasing. The commanding officer at the Fort, at the suggestion of some gentleman, I don't know who, in the spring, commenced cutting a channel across here, with a shovel and plow. I think the first year that was done was in 1823 or 1824, I cannot give the precise date. As soon as the water began to run, in the course of an hour, or two hours, it was a deep stream. The water had washed the sand into the lake. Immediately afterwards this lower entrance began to close, and that sand bar gradually wore away, while this continued to travel down

Q. That is, the opening they had made traveled down ?

A. Yes sir ; and this closed up and was carried away.

Q. How long did it take it to change from where they cut across down to where the mouth first was ? A. I think about this distance (indicating a point on the bar) They cut through again, between 1830 and 1831 or 1832, I think Perhaps it was 1828. I don't remember.

THE COURT.—Did you ascertain the length of the sand bar at the first time ? A. It was down at Mrs. Clark's house.

MR. JOY.—State how far that is ? A. I think it is a mile and a half. That is what is called the Pine Wood ? That is at one time. The second time, I don't think it was down as far as here represented—probably about there—(indicating a point.)

Q. Where was the usual and ordinary mouth of the



Chicago river in 1831? A. Well, sir; I think the mouth, at 1831, was about there, (indicating a point about two-thirds of the way down the sand-bar, represented upon the map.)

Q. State where that was in reference to the streets as they now exist? A. I have not looked at the map with that view; but in 1826, I will state the mouth was about there, (indicating very nearly the same point as above). I knew that fact, from occupying the Beaubien house, and fitting out my boats there. The boats were near a little wharf there. My house was there, and a little small wharf, and the entrance was there, (pointing.) I know a heavy south-east wind disturbed our boats, and we had to take our boats up the river; that was in 1826.

Q. In 1831, do you remember the position of Wright's place? Was it near the Handy house? A. Yes sir, that is the very spot. That is called the Handy house here. That is what I have been speaking of. It was only recently, since Mr. Handy came here, it was known as the Handy house. It was the house Beaubien occupied and subsequently occupied by Handy, built by Col. Crafts of Detroit.

Q. Locate the mouth of the river in 1831, in reference to the Handy house. A. It was right there, (indicating a point about two-thirds of the way down the spit of land.)

Mr. LARNED. Then in 1831 and in 1826, it was about the same place? A. Yes sir, that was the mouth of the river at that place.

Q. Locate the Handy house by the streets. A. I would not pretend to locate that; a surveyor could do it. The Handy house was, perhaps, 300 feet above that inclosure there—the old grave-yard.

Q. You spoke of a channel having been cut across by the officers, to admit boats at the bend of the river? A. Yes sir.

Q. How long did that remain as an opening there? A. Well, sir, it commenced changing immediately. Every north-east wind would drive it south, the gales would drive the river; would bank up on the north side, and the river would gradually go south forming that spit or bar. At every north-east gale, the river would go away down.

Q. What was the condition of the ordinard mouth of the river, as to depth, at the time and after the cutting through of this channel, up to the bend of the river? A. The water was deep enough to admit, I think, not less than three feet of water across here after they cut this out. I know after it was cut out we could have got a schooner in.



Q. But what effect did it have down here? A. It closed that right up—the former mouth. At the mouth it closed up, then it very soon wore away, so that it was all lake here.

Q. How long did it take to wear away? A. Three or four or five or six months. It went very rapidly. Every north gale or north east gale wore it away very rapidly.

A JUROR. At what time do you speak of that wearing? A. That was after the first cutting out the channel of the river. It was previous to the Chicago piers being made. After the piers were driven out, this filled up here.

MR WILLS. This channel was cut through prior to the building of the piers. A. Yes sir. I can't be positive as to the dates, 1823 or 1824.

MR WILLS. After this artificial channel, it was the tendency of the river to come back again? A. Yes sir. It was the tendency to run south, to gain a more southern direction.

Q. Do you know of this sand-bar being occupied in 1833, 1834 or 1835? A. Yes. I can't state as to the precise date, I think it was 1835. I know it was after 1834—I think 1835 or 1836.

Q. How was it occupied? A. By shanties—three or four or half a dozen shanties built upon it—little board shanties.

A JUROR. Was it not claimed previous to that? A. No sir, not occupied nor used at all.

Q. What do you mean by saying it was not claimed? A. I don't know, I mean that these shantee claiments were not upon it.

Q. You don't mean that this patentee didn't claim it? A. No sir. There was no ownership of the land, if it was claimed.

Q. Do you know anything about this subdivision—the old Kinzie plat? A. Yes sir, I am very familiar with it.

Q. [Presenting the old plat of Kinzie's addition.] Describe the position of these lots. State whether any of them run down on the bar. A. That represents the sand-bar. South Water Street was run out to the lake, and those lots were run at right angles with this street, until they struck the lake diagonally across the sand-bar, leaving a portion of the sand-bar down here, that this line would not strike it because the river inclined to the west. When Robert Kinzie laid out this pre-emption of his into town lots, he

run South Water Street in that direction, as you will see by that, and then laid off the lots 50 feet front, east at right angles, and then run across in that way, so that this part of the bar didn't embrace these lots. There was a part of this bar was not included in these lots.

Q. But still they all run down till they struck the lake?

A. Yes sir, I was a purchaser of a good many of those lots at an early day, and that was the way they were represented to me.

MR. HOYNE. What year were these lots laid out? A. In 1833, I think. The certificate will show.

Q. Do you say you purchased any of those lots. A. Yes sir, quite a number, and for that reason my attention was called to it. I purchased Robert Kinzie's interest. I bought it out and bought some of John H. Kinzie also.

*Cross Examined by Mr. Joy*—Q. Are you not mistaken in saying all these lots run down until they struck the lake. A. They were bounded by the lake in the rear.

Q. Were you present when that map was made? A. No sir, I was not present when that map was made.

Q. Where was the old Beaubien house there? A. [pointing it out,] that is the old Beaubien house.

Q. Where Collins lived? A. Well, that is off here some ways.

Q. You mean the Handy house when you say the Beaubien? A. I mean the Handy house when I say his old house. He might have gone into the Factor house, I think, about 1828. The south one was the Handy house, and the north one the old John Beaubien house; but formerly, prior to Beaubien's moving up to the Factor house, it was always called the Beaubien house or Craft's house. It was Beaubien who bought it from the American Fur Company. After Mr. Handy moved in it was called the Handy house.

MR. STUART. In 1828 he moved in? A. Yes sir, I think in about 1828.

Q. How much time did you use to spend in Chicago during these early years? A. I spent from four to six weeks here in the spring and fall, and I was occasionally here in the winter.

Q. Where did you live? A. Well, I don't know, as I had not any particular place.

Q. You had some station called your station. A. Yes sir, I had some ten stations along where the Illinois Cen-



tral Railroad is now located. I generally made the Iroquois station my headquarters.

Q. You only spent about eight weeks in the year here?

A. Yes sir. That was about four or five in the fall and in the spring, and I came occasionally in the winter.

Q. Were you here in 1823, when it was cut open? A. Yes sir. I was not here at the time, but a few days afterward. I was here the second time it was cut open.

Q. It was cut open in the spring, when the water was high? A. Yes.

Q. And the water run through, and made a large channel? Yes sir; the same thing in 1828 or 1829. I think about that date. I can't remember the year.

Q. I understand, at the time that cut was made the sand bar-south of that rapidly passed off. A. Yes sir.

Q. And it became an open sea. A. The first time it became an open sea. It wore away, and became open sea.

Q. So that there was no sand-bar there? A. None, except as the mouth moved down, and made a sand-bar. As soon as it was open, the original mouth closed, and then the winds began to wear it away and it disappeared. It came up and made a new channel, and the new channel was moving down all the time, forming a bar. There was always a bar there.

Q. How long a time did it take to wear it off? A. It might have been two or three years. I cannot recollect. The effect I know was to bar up the mouth—to dam up the old mouth.

Q. And it became open sea? A. Yes.

Q. How was it in 1829 and 1859. A. It began, and the sand filled in in the same manner as before. It stopped up here, and was gradually filling in east here, and when they run out the pier, it kept the water there.

Q. You say, after it was cut through here, in 1823 or '4, the effect was to stop it up down here, and this whole space became open sea? A. Yes sir. This lower entrance then shut up, and it was all open lake below it.

Q. What was the effect in 1829? A. It was about the same thing. The spit became smaller here, and then began to re form again. As I said, the north winds affected it so that the result each of these times was, that this lower end disappeared. This was filling up, and showed

lake shore here from this end, filling up here gradually. This bar, for instance, showed down here.

THE COURT.—In what way was the outlet protected when it was first cut? A. No protection at all, sir.

Q. The river, then, began to turn shortly? A. Yes sir, and re-form its course.

Q. How long did it continue so? A. The first wind from the north east it began.

Q. How long before it was protected by the pier? In 1835 or 1834, I think, sir. There was a permanent pier put here then—1833 or 1834. My impression is, we got vessels in in 1834 or 1835. The sand-bar then was filled up down to about there—(indicating a point.)

Q. Leaving water between the sand-bar and the pier? A. Yes sir. The pier was run across there, and there was a little pond of water between the sand-bar and the shore. The lower end was all filled up. It ran down some distance. I should think it ran down nearly to the Handy house.

Q. What became of that sand-bar? A. That sand-bar went away very suddenly one night. It disappeared under a very heavy north east gale. The next morning there was no sand-bar to be seen?

THE COURT.—What portion of it? A. The whole of it sir, clear up to the pier.

Q. Didn't you testify at the last trial, that it had been wearing away gradually? A. No sir. I testified that it had been wearing away gradually, and the height was lessening, but it finally disappeared one night—that the people inhabiting it in the shanties—

THE COURT. What length disappeared in one night? A. I should think nearly the whole length of it. The shanties were distributed along there.

THE COURT. Were there shanties on it at the time? A. Yes sir, and the people were in it the day before.

THE COURT. It disappeared one night? A. Yes sir, it disappeared so that in the morning you could see there was a sand bar, but it had all gone away.

MR. LARNED. About the Handy house. You say it was put there in 1833? A. Yes sir.

Q. What was the effect [of the pier]? A. The effect was to gradually wear away the sand-bar.

Q. Height and width? A. Yes sir.



Q. Didn't the sea beat over it for two or three years?

A. In very heavy gales from the north east it would beat over. In the fall of 1828, I remember of going over myself in a boat, in a heavy sea, right across it.

Q. Do you recollect when the surface of that bar finally disappeared? A. In 1836. I believe, the fall of 1836.

Q. The pier was put there in the winter of 1833-4. A. Yes sir

Q. Then during the winter of 1834 and the whole year 1835, and the year 1836, up to the fall of 1836, it had been gradually diminishing? A. Yes sir.

MR. McLEAN objected to the introduction of any testimony as to the overthrow, washing away or destruction of this sand bar, denying that such proof could effect the plaintiffs title; but as Mr Hubbard, the witness, desired to go to New York, he would allow the examination to proceed, subject to the plaintiff's exception, proposing to argue the question before the Court when the interrogatory was put to another witness.

MR. JOY. Verywell.

THE COURT. Let the examination go on then, without objection, for the present.

Q Then it had been working for nearly three years? A. Yes sir.

Q. How much had it diminished in width? A. I could not say, sir. It had diminished very materially. I will explain. When the pier was first taken across, just to the edge of the lake, as they progressed with that, the operation of the water upon this bar, was more and more sensibly felt from month to month.

Q. You could see the water was encroaching gradually for three years? A. For three years the bar was consumed and consuming by the operation of carrying out these piers, and not only the bar, but the burying ground or land below here.

Q. Which part first disappeared? Was it not the lower end? A. My impression is not, sir. I may be mistaken. I think it narrowed more here, opposite the Handy house. I think it narrowed here more. I think the force of the sea struck it from the angle of the pier and carried it away here.

Q. Was it not protected south of the pier, so that close by the south pier it remained? A. Yes sir, the pier sheltered it.

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Q. It was three years wearing away? A. As they carried out the south pier this begun to wear away rapidly, until you could see the effect of the current washing it.

Q. How much had been worn off the top of that bar before the fall of 1836. A. I don't think it was worn off by water at all. I think that was carried by the winds into the lake and river.

Q. In every storm did not the water pass over it? A. No sir, only in heavy gales.

Q. How high had the bar been in 1833? A. I should think four feet—three or four feet.

MR. McLEAN. What was that about how much had been washed away in 1836. A. I don't think the water had washed away the surface of the sand-bar, or had a tendency to wash the sand-bar away at all. I think it was done by the operation of the wind on the loose sand.

Q. How much had disappeared from the surface in 1833, 1834 and 1835? and how high was it above the water in 1836? A. It would be impossible for me to say how high it was above the water. I think the bar was narrowed down. There was considerable of it left at the time this claim was made.

Q. The claim was made in 1835? A. Well there was considerable land there—sand there at the time. I recollect a remark to myself, speaking to a gentlemen who bought it, Mr. Moore, coming to ask me to join with him in the purchase, I told him that that wouldn't last more than two or three years at best, that it would wear away, that it was washing away very perceptibly. I went down and showed him how it was wearing. He said that could be protected by spiling, and the operation of the sea would be to make the land instead of carrying it off. That was his idea.

Q. Take such storms as you have this fall, you have them every fall. A. We have had them every fall since I have been in the country.

Q. Didn't they every fall sweep over that space with the waves? They did sir.

Q. When waves were swept over would'nt they carry sand with them? A. Perhaps a little, but it was very rare instances that the sea raised over. It was very rare cases the sea was sufficiently high. The roll of the sea struck the shallow water here. It would carry it very high—

Q. Yet you went over in a boat once? A. Yes sir; once we were caught in the schooner "Napoleon," with Dr. Wol-



cott and his wife, and Mrs. Hunter, then Miss Wolcott, and Mrs. Wolcott. Mr. J. H. Kinzie, with a voyager's crew, came out to us, and dragged us over. We jumped out into the river, as we struck this sand, and, as the sea came and rolled over this bar, they pushed the boat over, and then jumped in and went on. We jumped in once. The waves struck and came clear across. That was in 1828. Mr. John H. Kinzie himself was at the helm of the boat.

Q. You don't recollect how high the bar was above the water in 1836, and during that fall? A. It was of unequal surface.

Q. The surface of a considerable portion disappeared in 1836, in the storm? A. Yes sir. I think nearly all of it. I speak now of the time when the claimants were upon it residing upon it.

Q. Didn't it disappear by the waves going over it? A. Yes sir, after that time the bar was very much reduced by the waves.

Q. Did it get so low that the waves could pass over it? A. Yes sir, in this severe gale. I don't think there had been a wave passed over it that season, until this one took away those shanties, but it was evidently disappearing all the time, to my view. The water sweeping through from the lake to the river, and in high water, as we have frequently, in our river, you will see the water running up stream here, in a perfect calm. In such cases here as that spit, you would find the whole bar moistened to the surface by the height of the water.

Q. After this storm, the next morning, you said that the sand-bar could be seen, but was under water. How much was it under water? A. I could not tell. You could see the line all along there.

Q. It was worn off the surface, but the sand-bar remained? A. Yes sir. A little under water; and at that time the bar could be seen, the same as you can see a bar in clear or shoal water.

Q. Did you notice prior to that, during 1836, the water running across the bar in spots? A. I think there were little depressions where in a heavy sea the water would cross over; it would roll up on the shore and roll over and tumble into the river inside.

Q. In what year? A. I think prior to 1836, that was only at two or three places at depressed points. That was the case in 1828. There was one place the sea broke over,

the balance was all dry and we jumped our boat over here. If I might explain in reference to these seas, that there are three heavy seas we all know, that are accustomed to the lakes in open boats—there are three heavy seas and then two little ones ; and that that heavy large sea will throw up two or three feet further on the beach of the lake than any other sea ; and taking advantage of that, we waited until we saw these three heavy seas, and when the heavy wave was about to strike the boat, we would help to put the boat across. That heavy wave would go across and we would help it—the men jumping out on each side of the boat as soon as it struck, and pushing it over—jumping into the water and helping the sea.

Q. You stated that that bar used to stretch down a mile and a half. A. Yes sir.

Q. How much of that formed after you came here and before it was cut in 1823 ? A. When I came here in 1818, I should think the river was below the Handy house some distance.

Q. How far did it come down before 1824 ? A. I could not say sir, how far it came down.

Q. Was that the time it reached down to Mrs Clark's ? A. No sir, I think it was later than 1824.

Q. About what time did it reach Mrs. Clark's ? A. I think just before we cut it out—in 1827, I think, or 1829. It was the fall previous to the cutting of this channel through—the last channel.

Q. Then between 1823 and 1829 it had stretched down a mile and a half to Mrs. Clark's ? A. Yes sir, it had stretched along there.

Q. Did you ever know it to be carried through there in the spring by the force of the water itself ? A. No sir, I have known the entrance to be opened ; for instance, down here it would be widened, and the water would carry it out of the mouth and deepen it, so that we could get out with heavy loaded boats and go back.

Q. Would that operate in that way except in the spring ? A. We have always found in the course of navigating the lakes, that some years we had high waters in the lakes—other years low water. I recollect in 1818, the first year I came up here, we passed through a rocky bound coast near the Waubans (?) between two islands. In 1824 we could walk across on the rocks. The lake was sometimes



higher and sometimes lower, and that probably affected the entrance of the river.

Q. This Wauban is near Mackinaw? A. Yes sir.

Q. You spoke about cutting across; take it in the summer time, and suppose you were to shovel out a place there, would it not go out the first spring? A. I don't know; it might make a channel. At that early day, the water from this prairie all came in at the north and south branch of the river, and there was a great deal more current than there is now. In high water, we had always a very high current of two or three miles an hour, which we don't feel now at all. That's in the spring and fall, whenever the Aux Plaines had a rise, our river had a rise and came down.

Q. Did you ever know that to be cut through, except in the spring? A. No sir. There was always a connection, I may say, between the Aux Plaines and the lakes.

Q. What that was cut through in 1823, you saw it a few days afterwards? A. Yes.

Q. How high were the banks on each side of the river when it went through the new channel? A. I should think may be three or four feet.

Q. How high was it when cut through in 1829? A. I should think about the same depth. I think on the summit of the bar about the same depth. I never paid particular attention to it. It was some considerable depth. It was unquestionably lower than the general level of our river here.

Q. Where was that sand-bar generally highest? A. Generally highest here.

Q. About where it was cut through? A. Yes sir. It was cut through here. There were high mounds here, twenty feet high—(indicating the point.)

Q. Had anything occurred since 1823 to diminish the height of the bar? A. No sir. I think the bar was probably gaining rather than diminishing.

Q. You say it was three or four feet higher than the water? A. Yes sir.

Q. You say it was eighteen or twenty feet here? A. There were little knolls. There was a ridge or summit. It was about the same height as down there, except the hillock where it caught something. The general height was about three or four feet.

Q. What do these lines indicate up here, swale or slough ?  
 A. No sir ; no slough there at all. This was 1818. This was the sand-bank—about the same height as here—as the beach. It commenced here, and that is about the same height, very little difference—from here to up here—(north of the bed of the river)—above the turn north are little hills.

Mr. LARNED.—Do you say there was little difference between the height of the lake shore above and on the bar ?  
 A. No sir ; about the same.

Mr. LARNED.—It was a continuation of the lake shore south ? A. Yes sir ; but there were depressions along here. They would catch the sands as they blowed about, and these hillocks would form fifteen or twenty feet high.

Q. Is there anything to enable you to fix the year it was cut through ? A. No sir. I have been trying to think, but I cannot bring to remembrance the year—nothing particular about it to fix the time.

THE COURT.—Do you speak of the first cutting through ?  
 A. Yes.

THE COURT.—The temporary pier ? A. There was no pier at all. I think about 1823—I am not sure—1823 or 1824—along there.

THE COURT.—Do you say that shortly after, that a severe storm swept the whole sand-bank away ? A. No sir ; no sir. That was since the U. S. pier was built in 1826.

THE COURT.—In 1823 the river gradually resumed its course ? A. Yes sir ; that was the tendency.

THE COURT.—What time was that pier bnilt by the U. S. ? A. Commenced in 1833, and finished in 1836.

THE COURT.—What storm do you refer to ? A. I think it was in the fall of 1836. My recollection is, these shanties were put on in the summer of 1836.

THE COURT.—Were these shanties there at that time ?  
 A. Yes sir.

THE COURT.—What portion of it remained before it was swept away ? A. The whole bar down to the Handy house.

THE COURT.—In what time was it swept away ? A. At one storm. That was three years after the commencement of the pier. The pier was commenced in 1833, and this was swept away in 1836, and during that period of three years, Judge, I saw this bar was gradually sinking.

THE COURT.—Did you speak of a gradual or sudden dis-



appearance? A. A gradual disappearance up to the time of this severe storm; then it was sudden.

THE COURT.—What part remained at the time this storm occurred? A. Down about to the Handy house, but it was lower and narrowed; we saw it decrease. It was then at the Handy house.

THE COURT.—How far—half a mile? A. Yes sir, a little over half a mile.

THE COURT.—That disappeared in what time in the storm? A. It disappeared in the morning; you could just see the outlines of the sand-bar. This was in 1836. It was never occupied after that, at all events.

THE COURT.—Were the buildings on at that time? A. Yes sir, some shanties and persons living in them.

MR. McLEAN.—What was the width at that time? A. I don't know what was the width—perhaps two hundred feet.

MR. JOY *resumed the examination.*

Q. I understand you to say it was worn away from 1832 to 1836? A. Yes sir.

Q. Diminishing in width and height, and then in 1836 disappearing below the surface of the water? A. Yes sir, I think so. After that you could see the sand along there through the water.

Q. After that bar went away in 1823 and became an open sea, was it open sea clear up to the main land? A. Yes sir, always open sea below the river—south of it.

Q. After this was cut through and this all washed away, it was open sea up to the lake shore? A. Yes sir; it was gradually re-forming again in the open sea.

*Direct examination resumed, by Mr. McLEAN.*

Q. Explain a little more distinctly, because I don't clearly comprehend you, what you say in reference to an open sea forming after a channel was cut through in 1828?

A. I mean by the open sea, from the mouth up here, this was closed up.

Q. Was there a sand-bar above the mouth, up to where the mouth was cut through? A. Yes sir; this gradually filled up from here, [the old mouth] and there was a little water there for some years—a little pond between the mouth of the river and the bend here; but supposing that mouth to be there when it was cut out, you could see all the way here, and then when this was cut through, the ordi-

nary mouth closed up, and it formed a part of the shore right along there.

Q. And then this mouth gradually wore down? A. Yes sir; this was gradually filling up here.

Q. You mean this sand-bar, as it then stood, formed the lake shore? A. Yes sir.

Q. Do you mean this sand-bar was washed away, and the shore was in here where it is now? A. No sir; the sand-bar remained, but being connected here with the upper part and it was constantly filling up inside, and after two or three years it became one river.

Q. Could they go across there at that time? A. Yes sir, but when they made this channel up here, there was the river still. This bar formed more rapidly the first three or four years that it came down. [Witness illustrated these remarks by referring to the map.]

Q. You spoke of the erection of the piers, and this bar disappearing constantly and continually; what produced that? Was it by the erection of the piers, or by the natural action of the water? A. Well sir, I am not scientific enough to state, but my impression has always been, that it was produced by the piers—that the running out of the piers there, caused an eddy, and it was constantly eating away and carrying away the sand.

Q. What was the effect produced upon this portion of the sand-bar after erection of the piers by the gradual action of the water, without storms? A. I think it was carried away by the current of the lake, formed by storms. It was very perceptible the moment these piers ran out, that the land was making on the north side and wearing away on the south side. The causes must be given by scientific men. The wearing away was evident—you could see it.

Q. Then up to this violent storm in the fall of 1836, the bar still remained as far down as Handy house—occupied and inhabited—with buildings upon it—and on the night of that storm it all disappeared. A. Yes sir, I say it all disappeared—there may have been a little sand to be seen—a little surface to be seen the next morning—but the buildings were floating away, and I saw them tearing them down to get rid of the rubbish and boards of these buildings, floating them along down to the shore here. It virtually disappeared that night and was not occupied afterwards,



except a little spit of land—so for years—a little spit perhaps fifty feet wide, right down the south pier, that gradually wore away.

Q. State where these waters that come from the West into the Chicago river have their sources? Where the dividing line is from the Aux Plaines? A. The south branch of the Chicago river extends up some six miles into the prairie. Between them there is a little stream that puts in on the Aux Plaines river—about two miles, perhaps, and this is the outlet both into the Aux Plaines river and the south branch at a place called Mud Lake. It has two outlets, one into the south branch and one into the Aux Plaines, and in high water the water passed over that prairie, so that you could go over with boats, I have been over—we call them *recollet* (?) You could only do that in high water, in times of freshets; and in those times the current here in this river was very strong, I should think four or five or six miles an hour.

A JUROR.—From the lake, or to the lake from the Aux Plaines? A. To the lake from the Aux Plaines.

Q. So that water caused it to cut a channel? A. That was one cause. The main cause was, the South Branch was dammed up by the ice, and the water accumulated upon the prairies, and when that dam broke, the water ran ten or fifteen miles an hour. It was very usual to have a strong current at that time.

Q. You spoke of depressions along here and up here. Were the same sort of depressions on the lake shore above and below the bend of the river? A. The same depressions,—the same depressions you witness now if you travel up the north side—the water running in after every heavy storm; when there is a log it drifts up and forms a mound.

GEORGE W. DOLE, called by the plaintiff, being duly sworn, was examined in chief by Mr. McLEAN, and testified as follows:

Q. I believe you are resident of Chicago, Mr. Dole? A. Yes sir.

Q. In what year did you come to Chicago? In the spring of 1831.

Q. What was your business then? A. I was a clerk for Oliver Newbury at the Garrison—the Sutlers.

Q. Where did you reside? A. I resided in the Garrison; some of the time I boarded up at the Point.

Q. Did you have charge or control there? A. Yes sir. I had charge of the garrison after the troops left—some few days after I came.

Q. At the time you came here, can you tell the appearance of the sand-bar and the mouth of the river? Describe it generally. A. (Looking at the map of 1818.) Well, I should think that was a good representation of the sand bar, as near as I can recollect. It may be a little narrower here, at the end of the sand-bar at the mouth of the river. I think it was a little north of Madison street. That was in the spring of 1831.

Q. That was the ordinary mouth of the river? A. Yes sir.

Q. (Presenting the Hathaway map.) Look at these maps, and see whether they conform to your recollection of the appearance of things in 1831? A. I should think that point was a little narrower here than it is on this map, down at the mouth. It looked so to me, from my recollection.

Q. Where was the mouth at that time? A. My impression is it was a little north of Madison street.

Q. Were you on the sand-bar about that time? A. Well, I think I was on the sand-bar some few weeks after I came out here.

Q. Have you any recollection of the height of that sand-bar above the level of the lake? A. No. I cannot tell precisely. It may be two or three feet, some places it may be over three feet.

Q. What was the condition of the bar as regards being dry or wet? A. The bar was dry in dry weather. When there was a storm the water would wash up on the bar. Heavy storms would throw the seas up on the bar.

Q. Do you remember where the old Kinzie house was situated? A. Yes sir. I believe I do.

Q. (Presenting the witness Greeley map No. 1.) Take that map and examine it. These blue lines represent the river—this yellow the sand-bar. There is the representation of the Kinzie house. Is that correct, according to your recollection, in reference to the line of the river and mouth? A. Well, sir, I think it is nearly correct. It is my impression it was a little east of where that is—at the



corner of Pine street. That comes nearer the centre of the street. My impression is, it was east of the centre of the street.

Q. Have you ever come into this river when the mouth was there? A. Yes sir.

Q. State whether you could see the Kinzie house? A. My impression is, it was east of that a little. You could view it going up the river.

Q. Are you familiar with the Kinzie plat? A. Yes sir. I have seen it. It is a number of years, though, since I have seen it.

Q. [Presenting the plat]. Locate the east bank of the river, if you can, according to the lots. A. Well, the east line of lot 27, ran along on the east bank of the river. [Taking Greeley map No. 1.] There is lot No. 27. The east line of lot No. 27—I think it was—the river turned there. I know about that. I purchased lot 27 of Mr. Newbury.

Q. Are you certain that was the east line, or west line, of your lot? A. I think it was the east line.

Q. Look at the map [handing him Greeley map No. 1.] There is lot No. 27. There is its west line. A. Both lines struck the river on this side here, and the east line ran along. It cut into the river, going some distance down.

Q. Do you remember anything about those fox hunts Mr. Hubbard testified about? A. No sir, I don't recollect. It was before I came here.

Q. What was the width of this sand-bar? A. Some three hundred feet.

Q. What, up towards the Garrison? A. I think it was some three hundred feet.

*Cross-Examined by Mr. Joy.*

Q. That was where the piers went across? A. Yes sir, up opposite the Garrison. I can tell more about it there than below.

Q. How wide was it below that? A. Well, I don't know. It narrowed down some. I should think some places down towards the mouth, it was not more than two hundred feet—from three hundred feet down to two hundred feet—some places two hundred and fifty feet.

Q. About two or three feet above the water? A. Yes sir; perhaps about three feet above the water. That is my impression about it.

MR JOY stated that he would defer the further cross-examination of Mr. Dole for the present.

MR. McLEAN preferred that the witness should be cross-examined while he was upon the stand.

THE COURT said the witness might be dismissed for the present, to be further examined, if desired, upon the points on which he had already testified.

J. B. F. RUSSELL, called by the plaintiff, being duly sworn, was examined in chief by MR. McLEAN as follows :

Q. Capt. Russell, when did you come to Chicago? A. I landed here in the year 1832, in the month of July, with the U. S. troops.

Q. Were you Captain in the U. S. Army? A. Yes sir.

Q. State the circumstances of your landing, and where you found the mouth of the river? A. In July, 1832, I landed my Company in the ship's or schooner's jolly boat—a small boat—at the mouth of the river, which was then a small opening ; I think at the head of Madison street. We thence came up the shore, got into the river and landed here

Q. Was there any other mouth of the river at that time than the one you came in? A. No sir, not to my knowledge, none used, at least.

Q. Did you bring any baggage—freight. A. Yes sir.

Q. Munitions of war? A. Yes sir, munitions of war.

Q. State the condition of the bar at that time. A. [Looking at the Hathaway map]. The condition of the sand-bar was, that this river was as it is here portrayed. Where the pier now is, it was about two hundred and fifty or three hundred feet wide, and then narrowed down to this mouth of the river pretty nearly as the figure represents on the map.

THE COURT. How wide do you say, Captain? A. Two hundred and fifty to three hundred feet. I never measured it but just by the eye.

Q. You say down to about Madison street? A. Very near the head of Madison street, opposite a little hog hut, then, or afterwards occupied by Mr. Wright's father. It is still remaining there.

Q. What was the height of the sand-bar from the surface of the lake at that time should you judge? A. At the lower part it was shallow. Up near the pier—where the pier now is—it was three feet and over. Near the Southern extremity of this bar it gradually went to the surface water almost. It thickened, or became higher, as you



approached to where the pier now is, to about three feet, or perhaps three and a half, above the surface of the lake. I have often been on it. I am perfectly familiar with it.

THE COURT—When was the highest point upon it? A. Well sir, nearer the pier.

Q. [Presenting the Greeley map, No. 1]. Look at that map and see whether that is correct. Do you remember the position of the old Kinzie house? A. That is my impression. When you entered the mouth of the river you could see something like the house, or the large tree, which was very conspicuous; and after coming in here it was shut out by the bend of that river—by the bend of that river. I have meandered this river from here to here at Madison street, and well recollect there was a bend here, but there [indicating the place], I think it could be discovered; but after you got into the river you could not, until you got to the bend.

Q. Is that a correct representation, from your recollection, of the relative positions? A. I presume it may be, sir.

Q. I do not speak of mathematical accuracy. A. I should judge it might be pretty near it. I have no idea in reference to these lots, whether it was in front of this lot or the other; but my impression is, we saw that tree and house, and that Indian trader's house, and it would be shut out here and seen again when you came further up here.

Q. Do you know where that tree was situated in reference to the present streets? A. Yes, sir. It was in line now of Kinzie street east of Lake House. I should think just east of Pine street. Here is Pine. I said east of it. I suppose very likely it may have been there (indicating the point).

MR. WILLS.—The tree stands very nearly in a line with the east line of Pine street? A. I think it would run very near to Pine street.

Q. Look at that representation of the sand bar, and give us your idea as to whether that is correct? A. My impression is, it formed very much more of a point than that is at the south end. It was a very narrow place—a very narrow place, indeed—where we came into the river.

Q. That was the time of low water in July? A. Well, I don't know, sir.

*Cross-Examined by Mr. Joy.*

Q. You had charge of the construction of the piers, had you not, at one time? A. Yes sir.

Q. And have lived in the city of Chicagy ever since? A. Since 1835, sir.

Q. You were not here in 1834 and '35? A. No sir.

Q. Were you here in '33? A. No sir. In the fall of 1832 I returned to the station and returned here in 1835, and I have been here permanently since.

Q. What time did you leave here from being here in 1832? A. I left after the campaign was over—I think the last of October or first of November, 1832.

Q. You were not here in 1833 at all? A. Not at all. Leaving here in November, 1832, I came here in May, 1835.

Q. Do you recollect the sand-bar in 1832? A. Yes sir, pretty good. I was in camp right along side of it for a month.

Q. How much had it diminished between 1832 and 1835, do you think, by the action of the water? A. It had to some degree—how much I do not know.

Q. It had grown sensibly less? A. I think so.

Q. Did the sea use to dash over it in 1832, when you came here, when there was a storm from the Northwest? A. Yes

Q. Did it sweep over the whole sand-bar? A. It did at the mouth of the river and up to Madison street—perhaps up as far as Washington.

Q. Where were you during the summer? A. I remained here until the first of September, and then took the field, and returned afterwards.

Q. How long were you here on your return? A. Three to five days

Q. You were not here during the storms in the fall? A. Not in 1832.

Q. You returned in 1835 and was here during the summer and fall; did the winds use to send the waves across in the fall of 1835? A. In 1835 I have very little recollection of it; I was absent about two or three months in the removal of the Indians, and I was not familiar with it during these months.

Q. You were here in the summer of 1832? A. Yes sir, in July; I was here about a month, from July to September; then we started on a campaign and I returned on the 1st of November, and remained here five days, and then joined my garrison at Green Bay.

MR. MCLEAN.—Was this washing over in calm weather, or storm? A. In times of storm, of course. It blew the water over the lower part of the sand-bar. It could not



up here, of course, because it was high, but down at the southern point it was quite low, and went almost to the level of the water.

MARTIN GREEN, called by the plaintiff, being duly sworn, was examined in chief, by MR. McLEAN.

Q. What is your business? A. Civil Engineer.

Q. [Presenting Greeley map, No. 2] Look at that map, I want to ask you a few questions. A. [Having examined the map,] Well, sir, I have examined it.

Q. Were you a contractor here in regard to taking up the old pier in the Chicago river? A. Yes sir.

Q. State what you found to exist there, in taking up the old south pier; what year was that? A. 1857-8. The old pier was there in a dilapidated condition, running from the west basin of the Illinois Central Railroad Company, to the west basin of Rush street bridge protection. That is the old pier, made to straighten the mouth of the river across the old sand-bar.

Q. What was the length, from the place where it turned to the termination of the pier in the lake? A. That I don't know. The pier, as I take it, projects about twenty feet into the west basin of the Company. There we commenced taking it up. The pier there was about eleven feet deep. It projected about eighteen or twenty feet into the west basin of the Illinois Central Railroad Company, on the west side. There was a floor in the bottom of oak plank. This was a wooden pier, of about probably twelve square sticks, pinned together and clamped together on the inside, and with piles. This pier had a three inch oak plank floor, and this was filled with stone up to the top. Ties run over between each square timber. I went west from there; and also had a dredge dredging on the east end. I broke through the pier, I think, about fifty feet from Rush street bridge protection, and commenced working at that end.

Q. What did you find there? A. We found timber and stone, and in the bottom—the bottom was made of poles.

Q. What was the depth of the pier at that point? A. I think about eleven feet. We worked a short distance in that direction, and found the pier came up very hard, and changed the dredges, and took up the balance of it. Here opposite the depot of the I. C. R. R. Co., the pier was about nine or ten or eleven feet in depth. The pier varied



a little in depth. There was not a very material difference until we got opposite to the west line of the depot, and the plank floor run out, and it was shallow, and now the bottom of the pier was clear sand and gravel. Here is the point on the map. There was loose clear sand and gravel; and as we worked, the sand and gravel continued until we got opposite the brick depot here, and found a large amount of cedar brush in the bottom, under the stone. It came up with the gravel, all together. I think about the east line of the brick depot, or in that vicinity, we found a little buttress or crib, that came out nearly at right angles with the main pier, about thirty feet long.

Q. Is that it represented here? A. Yes sir; I think that is it. Under that there was gravel—no brush I think—just clear gravel like this portion here.

Q. What was the depth of the pier at that point? A. Well, the depth of the pier at that point, I think, was five or six feet; some portion of it, I think, five feet below the water, and a foot or two above. As we went west, it began to run off, tapering rather gradually at first, and then suddenly—some portions of it twenty-two feet deep.

Q. How was the pier built from the place where you found that buttress-crib, west? A. Built of timber and stone, with piles, the same as the other, with a floor in it, with poles. I think the floor was about twelve or fourteen feet from the top. The poles from six to nine inches in diameter, laid this way, and stone on top of them. I think the deep portion was about two hundred to two hundred and fifty feet wide. After that we left that, west. We commenced soon after we left the brush, and run west two hundred and fifty feet, perhaps; and then after we passed that portion about two hundred and fifty feet, the pier became about ten to eleven and twelve feet again. We went on about the same way until we got within about fifty or sixty feet of Rush street bridge. The pier didn't seem to be laid the whole twenty feet wide, as I think the other portions were. It seemed to have a face on it, and, in fact, the pier was not entire. That is, the portion I broke through in getting a small channel, so that vessels could pass on the south side of Rush street bridge.

Q. Look at what is called the profile of the river bed on that map, and see if it conforms to the facts, as you found



them, as to depth? A. (Reads from the map.) "Eleven feet—five to seven feet—eighteen to twenty-two feet." Well, sir, I think that is about the way I found it. The figures represent the depth of the pier at the different points. Here is the deep part, and there it comes off eleven feet, &c.

Q. That is the depth below the surface of the pier? A. Yes, sir. I suppose this represents the pier that ran into the basin about eighteen or twenty feet.

COL RICHARD J. HAMILTON, called by the plaintiff, being duly sworn, was examined in chief by MR. McLEAN as follows:

Q. When did you first come to Chicago? A. In 1831, early in the month of April, or the latter part of March.

Q. Do you recollect the appearance of the sand-bar and the mouth of the river at that time? A. I do, sir.

Q. Turn around and look at those maps behind you, and see whether they seem to be correct according to your recollection? A. [Examines map of 1818.] It seems to be pretty correct, sir.

Q. Do you recollect at about what point the mouth of the river actually was at the time of your arrival here? A. Well, it seems to me, sir, it was somewhere not far from Mr. McCormick's Reaper factory.

Q. The mouth of the river? A. O! the mouth of the river! The mouth of the river was down, I should suppose, below where Randolph street now intersects the lake—not far from there—Randolph or Madison. I think it was somewhere, sir, between Madison, perhaps, and Randolph, not far from Madison.

Q. Were you ever on that sand-bar? A. Yes sir.

Q. Describe its appearance, height, length, width, &c.? A. Well, sir, its height above the surface of the water was somewhere about three to three and a half feet. I never measured it. I think it was one hundred and fifty or two hundred feet wide, perhaps—one hundred and fifty, perhaps. My recollection of its width is not very distinct.

Q. Have you lived here since that time? A. Yes sir, continuously—been no absence of more than five or six months.

Q. Look at this map [Greeley Map No 1] and see whether that corresponds with your recollection of the bar at the time you came here? A. It appears to be correct, as near as I can recollect—a pretty fair representation as near as I can recollect.

*Cross-Examined* by MR. JOY.

Q. You were here in '31. Were you here when the piers were built? A. Yes sir, before those piers were built.

Q. Do you recollect the looks of the lake shore along there by the grave yard? A. Well, I have no particularly distinct recollection.

Q. Do you recollect coffins as early as this year [1831] sticking out? A. Yes sir, I recollect them as far back as 1831 sticking out of the bank.

Q. Was the sand-bar outside of the bank? A. Yes sir.

Q. What caused them to protrude? A. I suppose, sir, the washing of the lake.

Q. Did the sea use to come over that sand-bar and come over and wear away the lake shore? A. At the lower end of it, it did, sir, and during a storm, or high wind.

Q. How far up towards Lake street did that graveyard extend? A. Well, it was some distance. It was below Randolph.

Q. Was it entirely below Randolph? A. I think so, sir. It was south of Col. Beaubien's residence. It was south of the Handy house--what was known as the Handy house.

Q. Are you quite sure? A. I guess it was north of it. What makes me recollect it a little more distinctly is, that I once expected to reside in it--the Handy house--and went down to examine it.

THE COURT.—You mean the old house of Beaubien, by the Handy house? A. Mark Beaubien once lived in it—not John Baptiste Beaubien—he resided near the Fort.

Q. How far up on that sand-bar have you seen the waves dash across it? A. I have seen it occasionally, in very heavy storms, heave over it considerably.

Q. Nearly up to the pier? A. No sir; say half or two-thirds of the way up, I have seen the waves roll over it into the river—I think half way or two-thirds. In November, 1831, during a very heavy storm, I think the waves rolled over the sand-bar for half or two-thirds the way.

Q. Did you ever see it so afterwards? A. I don't think I ever did, except that once. That was a very heavy storm—very heavy. The fact is, I never looked to see.

Q. That is the only one you happened to notice? A. I noticed that because it was a very heavy storm.

Q. Where did you live? In the garrison.



Q. How long did you live there? A. From the spring of '31 to '32. I lived over a year.

Q. Where then? A. I lived over the river, in the Agency house—the Indian agency.

Q. Is there not a rise of two feet sometimes in this lake, without any apparent cause? A. There have been two or three of these rises since I have been here.

Q. Does not the wind which blows from the north east, raise these waters a good deal? A. Yes sir.

Q. Sometimes, when the winds blew from the north east, and the waters were driven down into the south end, have you not seen that bar entirely submerged? A. I do not recollect to have seen it entirely submerged; but I have seen the waters dash over it very frequently at the lower end.

Q. Which end of that bar began to wear away first, after the piles were built? A. I do not know, sir. I think it mostly disappeared, according to my recollection, in a single day and night, perhaps; but the first beginning I do not recollect to have observed.

Q. Did you observe the effect of the water upon it during the years 1833 and '34? A. I don't think I observed it.

Q. Nor '35? A. I think my attention was drawn to it only by its disappearing in a pretty severe storm. That was in 1836.

Q. And during the intervening years you didn't notice it at all? A. Yes sir.

Q. Did you ever know the water to run straight out from the river, right over the bar, into the lake, where the piers now are? A. On one occasion I did, sir.

Q. What occasion? A. I think in the winter of 1831-2. The breaking up of the winter, in the early spring, and the flood getting a channel, there was a small opening made for it—cut out—right out to the lake; and that opening enlarged by the volume of water and the ice it carried out. There was an opening made in the first place.

Q. Did you see an opening made in the first place? A. I think I assisted in making it in 1831-2.

Q. Was it in the spring, Col.? A. Very early in the spring, when the waters were breaking up. The snow was melting. There had been a great deal of snow during the winter.

Q. What did they make the opening for. that year, sir? A. For the harbor, sir. It was done by the citizens prin-

cipally. It was in 1831-2. It was to get access to the lake—to get out to the lake.

Q. Did you ever know it done before? A. No sir; I never did, sir.

Q. How deep did that channel become during that year, sir? A. I do not now distinctly recollect; but I think some ten or twelve feet deep, perhaps more.

Q. How long did it remain there? A. I think it filled up the next fall. I do not know that it remained there all the season.

Q. Do you recollect seeing any vessels coming in there? A. I do not know; it seems to me there was a very small schooner that did get out. I don't recollect.

Q. How wide was the channel of the river at Fort Dearborn? A. I think it made a channel of some ten or twelve feet—that is, the new channel. I don't think it was more than twenty feet wide at farthest. It was a very narrow channel, sir.

Q. How high was the sand-bar there? A. Some three or four feet high.

Q. How long did it take to cut a channel across? A. A very short time after it was opened and the water commenced

Q. How many people were at work to cut it, in order to get the water to run through? A. I don't know; there were not many people here. They did it in the course of half a day I think.

Q. How wide was the sand-bar there? A. I should suppose two hundred feet, sir.

Q. What was the width of the sand-bar generally, up and down? A. I think it must have been not far from two hundred feet, perhaps something more than this. That is what I would put it at from my recollection.

Q. You never noticed to see how much it diminished, between 1833 and 1834, and 1834 and 1835? A. No sir.

*Direct Examination resumed by Mr. McLEAN.*

Q. You say that the citizens generally commenced and dug a trench along there, and the channel was made by the freshet and flood that year? A. Yes sir.

Q. Was there much ice in it? A. Yes sir, a great deal of ice.

Q. At the time that was cut there, did the old and or-



dinary mouth of the river remain where it was before ?

A. Yes sir ; I did not see much change in it. It remained pretty much as it was.

Q. Did not this new channel gradually fill up or wash down, until it resumed its old mouth altogether ? A. Yes sir.

Q. You never measured the width across the sand-bar ? A. No sir. I speak only from observation.

The Court took a recess for dinner, until half-past two o'clock.

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#### AFTERNOON SESSION.

E. B. TALCOTT, called by the plaintiff, being duly sworn, was examined in chief by Mr. McLEAN, as follows :

Q. What is your business ? A. Most of my life I have been a Civil Engineer.

Q. You have been deputy Surveyor of the United States ? A. Only a special deputy, sir.

Q. And in that capacity made a survey of this sand-bar spoken of ? A. Yes sir.

Q. [Presenting some documents to the witness] Examine these field notes and that plat, sir, and see whether these are the field notes, and that the plat of the survey made by you. A. [Having examined the documents.] I think it is, sir.

Q. That is a certified copy from the Department, of your survey. Was that a correct survey at the time ? A. I made a correct survey of the sand-bar, according to the notes furnished me by the government. That is a plat of that survey, I think, sir. If I might make an explanation, I will say, I afterwards discovered there was an error in the field notes. 'The meandering of the lake shore was wrong. The error was in entering this course, which is represented to be the line of the meandering of the lake shore, as running off here, instead of there. The course is marked west instead of east ; that is, the course on the west side of the lake ; the section ran here from the margin of the lake. That course was marked "north four degrees west," and I afterwards ascertained it should be "north four degrees east."

Q. State whether that correction there is right. A.

That correction of the original there is undoubtedly right, because, in making this up, that would not affect it. My survey ran through these buildings ; with that difference—with that correction—the survey is entirely correct.

Q. Those surveys show the condition of the sand-bar at the date ? A. Yes sir, including that error.

THE COURT.—What was the error ? A. The original notes furnished me by the government describe this course as running from this point north four degrees west, and it should be north four degrees east. I merely said my survey was correct according to these notes given me by the government, making the course of the lake shore running along here—the error being “four degrees east”—that would be the true line. It would extend below to section fifteen. It is given here four chains seventy four links to the section line.

THE COURT.—What is the date of that survey ? A. February, 1836.

Q. Does it give the width ? A. Yes sir, the width is given from the survey, but the survey is erroneous in running this line.

Q. It did not reduce the sand-bar ? A. No sir.

MR. LARNED. That alteration, as I understand, did not affect the sand-bar. A. No sir, it only affected the quantity returned by me as a part of the sand bar.

THE COURT. Down to what street in 1836 ? A. I stated the sand-bar extended down to section fifteen—Madison Street is the section line, I believe.

MR. WILLS. Explain that deflection there in that line on the pier. You ran up to that point and down and struck east. Explain that. Your notes call for an angle there in the survey. A. It is very easily explained. In tracing this line up here, which was the margin of the lake, it was measured up to the north side of the south pier. This course was along the south side of the south pier, until I came to the channel of the river, at that point. This was the channel. Then I took a course and distance which carried me across to the north side of the south pier. Then my measurement was made so as to include the pier.

Q. It is the difference of the width of the pier ? A. Not altogether, sir. The old pier, when thrown across the river, was cut there. When I was informed, and when I inquired why the angle was made there, it was told me, that when



the channel of the river was obstructed, from the sinking of the crib-work, the force of the current carried the crib-work down, and made an angle in the pier, and that angle was corrected by building over, so that, when finished, it presented a uniform line. That angle was merely crossing over from the south to the north side.

Q. State the dimensions of that sand-bar? A. I cannot, unless it is given upon the plat, sir.

Q. Look at the plat. A. Yes sir. Opposite section ten, it is given  $26\frac{17}{100}$  acres, and opposite section fifteen,  $11\frac{61}{100}$  acres. It is described in the field notes, giving the courses and distances surveyed.

Q. You could not tell without making a calculation? A. No sir, but a calculation from those field notes would be correct.

*Cross-Examined by MR. JOY.*

Q. Your estimate of the number of acres includes the whole river and part of the main shore? A. Yes sir; the twenty-six acres.

Q. The field notes of the Government survey carried you up to the mouth of the river, as it now is? A. Yes sir.

Q. Following the field notes of the original survey, the meanders of the lake shore, of section ten, takes you up to the mouth of the river, as it now is? A. Yes sir; that is shown on that plat.

Q. You speak of an erroneous line, that is, in the Government survey, which you followed, when it was westings instead of eastings? A. Yes sir; I had no other data except data from the Government. That erroneous line appears on my plat correctly represented.

THE COURT.—And you estimate the quantity of the erroneous line? A. Yes sir, that is included in the twenty-six acres. I can only speak from memory. We had an acre and a fraction too much by the mistake in lines.

Q. Do you remember how wide that sand-bar was when you surveyed it? A. Only from the plat here.

Q. Were you very careful to take it when the water was low, so as to get as much land as possible? A. Well, sir, I endeavored to trace precisely the line between the land and the water. There was some anchor ice between the lake and land in the winter time. It was frozen very hard.

Q. You calculated to get all the land there was? A. Yes sir.

Q. What month? A. I think the latter part of January

or February—the date of the notes will show. It shows the time of the survey.

Q. Not the time they were made up? A. The time of the survey.

Q. Can you take these notes, and from them state how wide this bar was? A. I presume I could with a scale. I could not from the notes without a computation.

MR. McLEAN. Have you examined this map. A. It is easily reduced from the scale upon which the map is drawn.

Q. Is there anything there which will show how high this was above the water? A. No sir; no notes were taken of that, sir. I can give you my impression, that is all. I should say some portions might have been three feet—not a very large proportion. It was nearer the upper end, probably, than any other portion.

Q. Under the pier? A. Yes.

Q. Where it was sheltered by the pier? A. Yes.

Q. Had the water beat in the lower end, so that it was solid land there? A. Yes sir; there was no open channel. It had driven in the bar so as to be entire. There is somewhere an old map, which will show that more correctly than this.

*Direct examination resumed by MR. McLEAN.*

Q. What was the object of making that survey? A. I was instructed to do it by the Surveyor General, at St. Louis. I don't know that I should say I was *instructed*. I was furnished by certain parties here with a special commission to survey that sand-bar, and furnished with a copy of field notes and a letter of instructions from the Surveyor General.

MR. JOY.—Who were the parties who furnished you these? A. Mr. Geo. D. Walker, of Ottawa, and Mr. James Kinzie, I think, were the parties.

MR. JOY.—Do you know whether they afterwards located a plat upon it? A. I have heard so.

MR. JOY.—Did they have shanties there at the time you surveyed? A. Yes sir; as pre-emption claimants.

MR. JOY.—These shanties were referred to in your field notes? A. Yes sir.

MR. JOY.—How were they built? A. They were wooden buildings, of pine boards—what we generally call balloon buildings.

MR. JOY.—Were they founded on blocks? A. They



grew up in a night, like Jonah's gourd. I do not know whether they had blocks under them or not.

Mr. LARNED.—What was this map, you spoke of that was a better representation? A. There is a map I made shortly after I made that survey, for the parties claiming to own it, on which this sand-bar is represented as it existed at the time.

Q. Is that on record? A. I am not certain as to the record.

Mr. JOY.—Do you recollect which fraction Jim Kinzie claimed? A. I do not sir.

Mr. JOY.—How long after they handed you the request to make that survey before you surveyed it? A. I could not say. It might have been two or three days, or ten days.

Mr. McLEAN offered in evidence a Certified Copy of a Letter from James Whitcomb, Commissioner of the General Land Office, to Daniel Duncan, Surveyor-General, St. Louis, Mo., dated May 5th, 1837, directing him to withhold his approval from the survey of Mr. Talcott; the above being a copy of the Record of the General Land Office.

GEO. W. SNOW, called by the plaintiff, being duly sworn, was examined in chief by Mr. McLEAN, as follows:

Q. What is your profession, Mr. Snow? A. What was it? I was surveyor, sir.

Q. Surveyor at what time? A. In 1833.

Q. [Presenting plat of Kinzie's addition.] Examine that plat, and see who made it? A. I made the survey and the map. It is the old map of Kinzie's addition, dated Feb. 22d, 1833. The survey was made previous to that—in Feb., however.

Q. State what it is a plat of? A. The original map of Kinzie's addition, north fraction, section ten.

Q. I call your attention to these water lots, fronting on Water street? How far do they extend south? A. You mean east?

Q. Yes. A. Well, there was no termination—there was no definite termination of these lots. There was a proposed improvement to the harbor, and these were supposed to end on that. There was an appropriation made, and these were drawn in reference to that.

Q. Was the pier made at that time. A. No sir.

Q. State whether they were laid out running down on that sand-bar, or how? A. Yes sir, as here represented.

Q. You say they had no definite termination? If these lots were continued on, where would they strike? A. The lake sir. If they were extended on between parallel lines, they would strike the lake.

Q. What was the principle upon which these lots were constructed? Were they intended to run down to the lake? A. These were run to the river, and the proposed harbor was supposed to be parallel with these, and they were to end on it.

Q. To end on the harbor was the understanding? A. Yes; indefinite altogether. The appropriation had been made, and was expected. The work was expected to be, and was, commenced that year, and this was intended to run parallel with the proposed harbor.

Q. Was there any pier there at the time? A. No sir.

Q. Had any been projected across there? A. No sir.

Q. Where was the mouth of the river? A. The mouth of the river at that time was, I should say, between Washington and Madison streets, here.

Q. Were these lots laid out to extend clear down to the lake? A. Why, here is the representation of it.

Q. As these lots are extended, don't they run beyond where the pier was placed? A. Yes sir.

Mr. WILLS—Be kind enough to state where you began. A. We began here, and ran sixty [feet.] We began at the meander's mound, between sections nine and ten on the river.

Q. Was it not intended that all these lots should have a water boundary? A. Yes sir.

Q. Was that the principle upon which they were laid out? A. Yes sir.

Q. Were they called water lots or not? A. I suppose they were called water lots—I don't know.

Mr. WILLS—State how the lines of the lots were let fall. A. At right angles. This was intended to correspond as nearly as possible with the curve line here; that is, at right angles with Water street.

Q. Were these lines extended for quantity at right angles to Water street? A. Yes sir.

Q. Between parallel lines? A. Yes sir—sixty feet.

Q. Where would these lots, extended, terminate? A.



They would terminate with the lake, extended. These with the river, when they bounded on the river.

Mr. WILLS.—State how much of that is a survey of the river, and how much a sketch? How far did you survey the line? A. I could not say definitely. I should say about lot No. 25. That is, as far as the river was accurately surveyed.

Q. How about the balance of it? A. All the rest ran on the sand-spit. They all went on the sand-spit. You ask for an accurate survey. There is Nos. 26, 27 and 28. That would interfere with that survey, [illustrating with the map.]

Q. Then, this line, with the east line of the river, was not laid down by you from a survey? A. It ran about where we supposed the harbor would be—'24 and '25.

Q. What was the character of the bar at that time? A. It was a mere sand-spit; or, more properly, a bar or tongue of land.

Q. How high was it above the surface of the lake? A. It would be hard to say. It might be, in the middle, three feet.

Q. What was the width of that bar, or tongue of land, at the curve of the river, where these lots ran across? A. Well, I should say, three hundred feet, more or less.

Q. How far did it extend down south? A. I should think, between Washington and Madison streets. That is, the southern extremity of section ten. It was in that neighborhood—sometimes less.

Q. Where was the mouth of the river then? A. That was it, at that point.

Q. Did the bar continue of the same width all the way down, or diminish in width as it went down south? A. The general average of it, I think, diminished; but I think, immediately as it left this point here [the bend of the river] it increased for a time, and made a little more.

Q. Look at the Hathaway map. A. That is more like it. There was more indentation there at that time, than there is on either of these. I should think this [Hathaway map] was not a great ways from right. It was slimmer here at the point.

Mr. LARNED.—About midway was the increase? A. I should think it was greatest right here, [just below the bend.]

Q. Where was the Handy house? A. I should think very near the end of Randolph Street—it might have been a little south. That is the Mark Beaubien house.

*Cross-Examined by MR. JOY.*

Q. When you spoke of these lots being water lots, did you not mean in reference to the harbor which was proposed to be built? A. Yes sir, that was the understanding at the time.

Q. Did you measure the length of the lots down on the sand-bar? A. No sir.

Q. The only object in running them down, was to run them down to the pier. A. Yes, so I understood it.

Q. That was what you mean—they were to front on the proposed harbor? A. No sir.

Q. There was no [definite] length to these lines? A. No sir, they were never projected down there. The map shows where they terminated. That was the whole of their paper.

Q. You run down to the end of your paper? A. Yes sir.

MR. McLEAN.—You would have run them longer if you had had the paper. A. That came out of a merchant's packing box.

MR. McLEAN.—Paper was scarce then? A. Yes sir.

Q. When you speak of the sand-bar, you mean the tongue of sand beat about by the waves. A. Yes sir.

Q. It was beat about by the winds and waves. A. Yes sir, that was the truth, I have been troubled here a good deal with that same thing.

Q. Why? A. Because it works about so much.

Q. It won't stay where you put it? A. No sir. I heard to-day—if it would not be interrupting you—Col. Hamilton and Mr. Dole both said, this was cut through in 1831; and that will account, in some measure, for the great difference between this map and the one recorded. They cut it through, and that water lot made an indention; and when I ran this line, I supposed the water lots would run to the harbor, or I should, probably, have continued it more like this.

Q. Was Mr. Robert Kinzie living here at the time? A. Yes sir.

Q. Was Capt. Hunter living here? A. I don't think he was living here—he was here, during the survey.



Q. Capt. Wolcott? A. No sir. Mr. Robert Kinzie, John Kinzie, and Mr. Hunter managed the survey.

Q. They were all with you when it was surveyed? A. Yes sir.

Q. They were giving you directions? A. Yes sir.

Q. And their wish was to have it extend down to the pier as it was to be built? A. Yes sir, that was the understanding, and that was spoken of in reference to this street. It was supposed the harbor would run out parallel with that street.

Q. And your object was, to get them long enough to reach it? A. Yes sir.

Q. Did you take any survey of that sand-bar, to see how large it was at the time? A. No sir, not at all.

Q. You took no survey beyond what appears to be a few feet south of Water street? A. Yes sir.

Q. There is no measure whatever at the east end of Water street south of it? A. The only one is this—an observation taken at that point to get a couple of hundred feet.

MR. McLEAN.—What street is where it struck the lake?

A. Water street is where it struck the lake.

MR. McLEAN—Water street is where it struck the lake?

A. Yes sir—24 is the last lot, I believe.

Q. You say, that sand-bar might have been three feet high in the middle. What part of it do you mean? A. The general average—its back-bone. It was shelving both ways.

Q. Would it be three feet high when you got down half way? No sir, I think not. I think it shelved off south, and sloped off to the lower end as well as to the sides.

Q. You came here in 1832. Did you ever see the storms beat over that sand-bar? A. Well, I don't remember having seen it—not the main body of it.

Q. Do you recollect where the grave-yard was? A. Yes sir. There were two. The one I mean is farther south than the one talked of. There was a pretty tomb or paling, with a slab on top of it—that was north of the Handy house. The other, which we call the grave yard, was still further south—I think, in fractional section 15.

Q. Did you observe none above that? A. I don't remember any coffins above that. I may be mistaken.

Q. Where was the grave yard? A. North of the Handy

house. That was a little south of where John Baptiste Beaubien lived.

Q. Near Randolph or Lake Street? A. Nearer Lake than Randolph.

Q. Between Lake and Randolph? A. Yes sir. I think so (looking at the map of 1818.) I don't see any streets that I recognize here.

Q. Did you know of any person's being buried in the northern burying ground? A. No sir; they were buried on the West Side, after I came here. The garrison buried their people where I saw it was noticed by the papers, the other day, that they dug up some on Water street, between Water and Lake streets, and between State street and Webash avenue-- in that neighborhood.

Q. Didn't they bury them down on the lake shore? A. No sir. I guess they never buried any there. I know they buried them here.

THE COURT—The grave-yard you speak of was not on the sand-bar? A. No, no; it was on the lake shore. It was an officer's grave, with a very pretty slab.

Mr. McLEAN—What year did you come here? A. 1832. It was in 1832 I saw these coffins sticking out. I am not positive about it, it is so long since, and it is so much changed. There is a great similarity in the whole coast.

Q. Did you observe that sand-bar much after the pier was put there, and between that time and the latter part of 1836? A. Why, yes, I saw it.

Q. Was it gradually wearing away? A. Yes sir, it was.

Q. Can you form an idea of how much it diminished during that period of time? A. No; I think it shifted more than it diminished. I think it worked in shore.

Q. Was driven in shore? A. Yes sir, either by the wind or water.

Q. Was not that the way it disappeared? A. Yes sir; driven in shore.

Q. It filled up and then gradually disappeared afterwards? A. Yes sir.

*Direct examination resumed by Mr. McLEAN.*

Q. What do you mean by this gradual disappearance you were asked about by the counsel? A. It gradually ceased to be a spit. I said I thought it didn't disappear



as much as it *shifted*. It worked in towards the shore as they extended the piers out. The waves interfered with it, and either drove it over or took it away.

THE COURT.—What time was the pier completed? A. They continued to extend it—I don't know how many years—until since they cut us off from appropriations. As they got further out, it came in heavier and heavier.

MR. LARNED.—What do you mean by its being driven in? A. I mean it wore upon one side and made upon the other. It shifted to take the place of the bed of the river.

MR. JOY.—What caused it to shift? A. I suppose the winds and the waves. The wind would take it over. There is a drift here, from the north to the south; and if there is anything to hold it, it will stay, and if there is nothing to fill up the vacuum it wastes; and this, I think, drifted in more than it went in south. I think it drove in more ashore than it went away.

MR. LARNED.—Leaving the same quantity of land there, but moved towards the west? A. Yes sir; that is the idea; and the water in 1838 rose very high.——

Q. Never mind that. You think this grave yard was the one farthest south, where the coffins stuck out? A. Yes sir; that is my impression

Q. Your impression is, it was below where the mouth of the river was? A. Yes sir. That was in 1832.

*Second Cross-Examination by MR. JOY.*

Q. What were you going to say about the water in 1838, when the counsel stopped you? A. It was very excessively high water in 1838, and undoubtedly that sand-spit was less to appearance.

Q. Was there any of it to appearance there when the water was high in 1838? A. Well, I am not positive.

Q. Be pretty sure—so as to remember. Was there *any* of it there, to appearance, when the water was high in 1838?

MR. McLEAN objected to the question, and to all evidence from the defence as to the overflow and washing away of the sand-bar.

MR. WILLS suggested that the discussion of the question raised be postponed, as it would occupy considerable time, until the close of the testimony in reference to boundary, &c. Agreed to, and witness dismissed for the present.

MORGAN SHEPLEY, called by the plaintiff, being duly sworn, was examined in chief by MR. McLEAN.

Q. Were you at work on the Government piers in 1833?

A. Yes sir.

Q. What time did you come to Chicago? A. In June, 1833.

Q. Did you examine the sand bar and Chicago river at its mouth at that time, and if so, state how it was? A. When I came here, I came off a vessel into the river, away down below—well, its a street or two below Randolph. I came in a small boat away down by Madison Street some where—I should think it was between Madison and Washington. There was where we came into the river.

Q. Was there any other mouth of the river? A. There was no other mouth at time

Q. What was the appearance and condition of this tongue of land, or sand bar, as it is familiarly called? A. Well, it ran all along from the north side clear there. It was connected to the north side, and ran clear down there to the mouth. The sand bar ran from the pier, clear along down to Washington or Madison Street—to the mouth of the river.

Q. Continuous land all the way up? A. Yes.

Q. What was the average width of this sand-bar, from the bend of the river down to the mouth? A. I should think it was between two hundred and fifty and three hundred feet, where we ran the south pier across the bar—that was at the bend of the river.

Q. What was it lower down? A. It ran off in this shape—slanting. The ground was gradually lower all the way down—slanting down. Somewhere between Madison and Washington, was the entrance of the river from the lake.

Q. What was the height of this sand-bar above the level of the lake? A. Well, I should think from two and a half to three feet, I think when we excavated through for the piers—it was in the neighborhood of three feet. It ran slanting off, however, all the way down to the entrance, gradually descending.

Q. You have said you aided in the construction of the south pier. Does that represent the south pier [presenting Greeley's map, No. 2.]? A. Yes sir.

Q. When did you begin? A. We commenced at the



Garrison point to run the pier, and we ran across. We commenced on the west bank of the river, and ran it across to where it struck the bar. We commenced right at the west side of the bank of the river, and ran across the river to the shore and across the bar.

Q. Explain how you built this in the river. A. We built it with crib-work all the way.

Q. How were these cribs made? A. Thirty or forty feet long—just as our timber would admit. They were twenty feet wide. There was a floor and there were ties, so that it would not take so many stone to fill. This is where we crossed the original channel [pointing it out.] Before we got into the channel, we built them slanting.

Q. What was the depth? A. From nothing up to twenty feet. I think the river was nearly twenty feet deep at the deepest part, and then, as we approached the sand-bar, it grew shallow; and when we got up to the sand-bar—then we excavated the sand away, and laid puncheons, as it is termed—timber flattened on both sides. We laid them down flat, and put over timber longitudinally on them. That was on the sand bar.

Q. From the river to the lake shore it was puncheons? A. Yes sir. These were laid on the sand, and there our crib-work commenced.

Q. Have you a recollection of a buttress-crib? A. That buttress-crib was put there, but it wan't intended for a buttress-crib; but the current kind o' shot it out, and we could'nt hold it. It got out of line, and we left it a little caterin'. It was right at the sand-bar in the river.

MR. LARNED.—At the boundary line between the river and the sand-bar? A. Yes; right where the east bank of the river touched the sand.

Q. Do you remember a break occurring there as you were building? A. There was occasionally high waters—I don't remember any break.

Q. How did you stop the waters that ran through there? A. We put in brush and stone.

Q. What sort of brush? A. Cedar.

Q. Juniper? A. I presume they were.

Q. Where did you get them? A. Down below.

Q. Any of them grow on this sand? A. No sir; none of them grew on this sand. We put them in the buttress-crib with the stone, and I presume a lot of hay in there, to stop the water.

Q. Then right at the point where the river joined the sand-bar, you put this buttress-crib to stop a leak, or break, with all these bushes? A. Yes; all kinds of bushes we could get. We filled in stones on the top of them.

Q. Can you tell me the width of that sand-bar, from the place where you put in those bushes over to the lake shore? A. I think it was between two hundred and thirty and two hundred and forty feet, from the river over to the lake shore. That is the width of the sand-bar at the time we approached it.

Q. Do you remember the width of the river there? A. No sir.

Q. Do you remember the depth of the piers along the sand-bar? A. I think we built that up about five feet high above the level of the bar.

Q. Do you remember the depth of the pier along the sand bar? A. I think we built that up about five feet high, above the level of the bar.

Q. Then you sunk it down? A. Yes. These sticks put on here were in the first place a foot thick. We dug down and laid them down, as well as we could, in still water. That was on the sand-bar.

MR. LARNED.—Did not the pier go over the sand bar into the lake? A. No sir, it just terminated right with the lake shore.

Q. Have you a recollection of an angle here—a slight deflection or angle in the pier, as represented there? A. Yes sir.

Q. At what point was that? A. Right at the lake shore.

Q. That deflection in the pier? A. Yes sir, the little angle. That angle ran north—the inside work did.

MR. JOY stated that he would defer the cross-examination of Mr. Shipley for the present, desiring to ask him in reference to the overflow.

JACOB MILLER, called by the plaintiff, being duly sworn, was examined in chief by MR. McLEAN, as follows:

Q. When did you come to Chicago? A. In May, 1834.

Q. Did you assist in building these piers Mr. Shipley has been testifying about? A. Yes sir.

Q. Were you at work upon it? A. Yes sir.

Q. What was your work? A. Blacksmithing.



Q. What portion of the work did you do? A. Well, sometimes I mended things, and when they were putting out the piers and cribs, it took all the hands they had and I helped.

Q. Did you have any spile driver? A. Yes sir.

Q. [Presenting Greeley map, No. 2.] Do you remember a break in the piers, where it was, and how it was stopped?

A. That was in the south pier, on the west side of the bar.

Q. At what point? A. It was on the west side of the pier.

Q. At what point? A. On the south pier. We run it upon the bar six feet wider, to keep the water from getting behind the pier, and getting over there—we run a crib up six feet wide, and may be twenty-four feet long, on the bar.

Q. Do you remember about a buttress-crib being there? Or is that the crib you spoke of? A. Yes sir.

Q. How did that stand in reference to the south pier—the other pier? A. It leaned over. It undermined the north side of the south pier, so that it tipped over.

Q. What then? A. Then we put in more stone and put in a regular brick-work, and made the north side high, so that it would be level.

Q. Was anything put in on that south side? A. Yes sir, we put in stone.

Q. Was a crib put in? A. Yes sir.

Q. Where was it? A. That was on the bank of the sand-bar, on the west side.

Q. You mean where the water joined the sand-bar? A. Yes; the river and the sand-bar came here.

Q. Do you remember about any brush there? A. Yes sir, in that small narrow crib there.

Q. What brush? A. Brush cut up on the North Side.

Q. Juniper and Cedar? A. Yes sir.

Q. How high was the sand bar above the water at that time? A. May be a foot and a half or two feet. Up to the north pier it was higher, and as it ran down it grew less.

Q. About where was the mouth of the river at that time? A. Well, the mouth of the river at that time, was in the neighborhood, between Madison and Washington street.

MR. JOY, by consent, deferred the cross-examination of this witness as to the overflow, &c.

O. C. BAIRD, called by the plaintiff, being duly sworn, was examined in chief by MR. MCLEAN, as follows :

Q. What time did you come to Chicago? A. I came here in the spring of 1836. I arrived in Chicago the last of May or first of June.

Q. Do you remember this sand bar? A. Yes sir.

Q. Tell where the mouth of the river was at that time? A. I could not give the exact distance. It was down quite a distance. It was two or three streets below this—two streets below this

Q. That would be about Monroe street. How high was the land on the surface of this bar, above the surface of the water? A. Well, it varied from a foot up to three or four feet.

Q. How do you mean? A. Well, at the pier I should think it was nearly four feet, and as it went along down towards the centre of the island, or below there, it was three feet.

Mr. JOY.—About where? A. About the centre of the island, I should think, it was three feet, then it diminished in thickness better than half way, and then it tapered off.

Q. You mean by island, this spit? A. Yes sir. It held its thickness about half way, and then tapered off to about a foot.

Q. [Presenting Talcott's map.] Here is a survey, made in 1836, of this bar. See how it corresponds to your recollection? A. Well, as for the size of it, I should think it is wider than on that point than it is here [indicating a point]

Q. About the centre you think it was wider? A. Yes sir; otherwise it is about right. On the centre it was wider.

Q. Did you know Henry Moore? A. Yes sir; I was not personally acquainted with him. I saw him in conversation with Mr. Hoyt.

Q. Did you ever enter into possession of this sand-bar—any portion of it? A. No other way, only under the employ of Mr. Hoyt or Mr. Moore.

Q. Did you, under the employment of Mr. Hoyt or Mr. Moore, enter into the possession of this property? A. The



way it was talked to me at the time was like this : Mr. Moore was taking, to Mr. Hoyt in relation to putting up a building on the island. To get the idea of these things, probably, I ought to go back farther. The time I came to Chicago I put up at the Mansion House. Mr. Hoyt and Mr. Smith were mechanics. I was a mechanic likewise, and came here and got acquainted with Mr. Hoyt by boarding there with him, and being of the same profession with him. One day Mr. Moore was talking with Mr. Hoyt about erecting a building on this island, and it seemed they had had a talk before, and Mr. Moore wanted Mr. Hoyt to select the lumber. Mr. Hoyt turned around and spoke to me, and asked me if he could get me to help him do some work. I was at work for another man, and told him not, but probably, I should see about the middle of the week. That was all the answer I gave. When it came Saturday night, I told Mr. Hoyt I would go down to work for him, and asked what he wanted. He said he wanted me to go down and help raise that building Monday morning. Monday morning I went down and went to work and put up the building.

THE COURT.—What time was this ? A. In the year 1836, in the fore part of June.

Q. Mr. Hoyt and yourself were working for Mr. Moore ?

A. Yes sir, it was for Mr. Moore the building was put up.

Q. What sort of a building ? A. Sixteen by twenty feet, one story building—what we call balloon framed, sided and shingled.

Q. Was it set upon the sand ? A. No sir, it was set upon blocks. We dug down upon the sand and set it upon blocks. It was 16x20. We dug down in the sand and put the blocks in, and set the building upon them. It stood upon timbers.

Q. Who lived in that house after it was put up ? A. No one lived there, I occupied it as a joiner's shop.

*Cross-examined by Mr. Joy.*

Q. Where was this house ? A. Well sir, it was nearly in the centre of the island. It was below, south of Lake Street and south of the street this side of Lake Street, I think.

MR. LARNED.—Randolph street is the first south of Lake. This is Washington ? A. I think it was between this and Randolph street, nearly in the centre of the island. Down

on the lower end of the island we went on, and came up pretty nearly the centre of the island, or sand-bar.

MR. McLEAN.—You call it an island, because the pier was built across? A. Yes.

Q. Where do you reside? A. Kane county, in this state.

Q. How long have you lived there? A. I have lived there ever since 1836. In the fall of 1836, I moved from Chicago.

Q. What time? A. The last of November or first of December.

Q. Was Mr. Moore here during all that year? A. I could not tell you whether Mr. Moore was here during that time.

Q. Did you ever see him more than once? A. Yes sir.

Q. What sort of a looking man was he? A. My best recollection now is, he was rather a spare, thin man.

Q. What was the complexion of his hair? A. I don't know as I could describe it. It appears to me as though it was rather sandy.

Q. Was he a tall or short man? A. Rather tallish—rather slim.

Q. You never saw him afterwards? A. No sir.

Q. How many times did you see him? A. Probably three or four times. I say I am not personally acquainted with him; only there talking with Mr. Hoyt that time.

Q. Was that the only time you ever saw him? A. I think I saw him once or twice before. I recollect that time.

Q. Did you rent that house of him? No sir.

Q. Do anything more than put it up? A. No sir.

Q. Did it take you two months to put it up? A. No sir; I was to work for Mr. Hoyt. He was a boss mechanic. He took a job of sashes, and I made them on that island.

Q. You think it was about half way down? A. Yes sir.

Q. How high do you think it was there? A. I should think it was all of three feet.

Q. What time of the year was that? A. In the month of June—the fore part of June—not far from the middle of June. I started over from Buffalo the middle of May, or first of June. I hadn't got here but a short time before I went to work for him.

Q. Was that the only building there was there? A. That was the only building on that island at that time. There was a couple of buildings near the lower end of the



island, near what I call the shore of the lake. This sand-bar didn't connect with the shore of the lake at that time.

Q. It has been testified here that there were buildings upon this island. A. It might have been upon this island in that way, by the bar attaching to the shore.

Q. You say this island didn't attach? A. No sir.

Q. No connection between it and the shore that way? A. No sir. There was water betwixt the shore and the island.

Q. How much water? A. A small quantity. I don't think it was over a foot deep. We drove right across there with the wagon, and drew the lumber.

Q. Did they drive through all the time, while you were there? A. Yes sir.

Mr. WILLS offered in evidence certified copies of a number of Harbor Reports, made by the officers of the government, having charge of the work, including the Annual Reports of Lieut. Allen, from the commencement of the Harbor in 1833 until the year 1836, when he ceased to be U. S. Supt. of Lake Harbors.

The Counsel for the defendants said they would take them, and examine them by to-morrow.

### THIRD DAY—FRIDAY, NOVEMBER 11th, 1859.

THE COURT met at nine o'clock, and the jury being called, the trial proceeded.

JUDGE DRUMMOND delivered the opinion of the Court, in relation to the objection made yesterday by the plain-counsel to the introduction of evidence on the subject of the overflow, disappearance and destruction of the sand-bar, deciding to allow the testimony to come in subject to objection by the plaintiff's counsel.

WILLIAM GAMBLE, called by the plaintiff, being duly sworn, was examined in chief by Mr. McLEAN, and testified as follows :

Q. When did you come to Chicago? A. I came in June, 1843.

Q. What was your business? A. I was clerk to the General Superintendent of Lake Harbors up to 1847. I was their Agent for the Harbor from 1847 to 1853. The Superintendent was Capt. McClelland.

Q. In your capacity, under Capt. McClelland, did you make a survey? A. I made surveys—almost every year.

Q. Did you make a survey of Chicago river, and the buildings? Any maps? A. Yes sir. This is one of them. Twice a year the surveys are usually made—surveys and maps.

Q. [Presenting the Gamble map.] Explain what that is and what it represents? A. This is a map of the harbor, piers, and government buildings, the government reservation, old Fort, and the dock lines as far as this point, surveyed by me individually. [Witness points, out the various localities above named. Marine Hospital—storehouse—carpenter shops, old magazine, block house, quarters of the commanding officer, light house and light bouse keeper's house, &c.]

Q. What year was that? A. In Feb. 1850, this survey was made

Q. In making your survey, do you remember any deep-hole in the Chicago river, where the piers were, on the south side? A. There was one east of the government barn, down here, previous to this time; but in 1850, when this survey was made it was pretty much filled; but when I first came it was there. I never surveyed the hole itself, but I simply described its locality [points it out]. It is opposite the Marine Hospital—nearly in line east of the Marine Hospital—I should say about two hundred and fifty feet (distant.)

Q. What was the length and width of the hole? A. It was in the shape of an oval or ellipse about a hundred feet wide by two hundred long—about that. I never measured it.

Q. What was the depth? A. I think it was ten or twelve feet deep. There had been ice cut there two winters.

Q. [Presenting Greeley map, No 2.] Examine where there is a hole delineated, and see if that is correctly represented there. A. [Measuring the dimensions.] Well, that is about what I said, two hundred or two hundred and fifty. I think it was the form of an ellipse. This is rather square. With that exception it is pretty correct. Its position is very nearly where my recollection would place it.

Q. Do you know anything about a man's being drowned there? A. No sir, I don't know it. I have heard of it.

*Cross-Examination by MR. JOY.*

Q. What became of that hole? A. It filled up.



Q. How? A. By the sand washing into it.

Q. Was it added to the main shore by the action of the waters? A. Yes sir.

Q. Is that upon the tract of land deeded by the U. S. to the Illinois Central Railroad Company? A. I don't remember what the deed specified in regard to its boundaries.

[Mr. Joy indicated the boundaries on the map]. All that land outside the water line, was deeded by the U. S.

Would that hole, then, be on the lot deeded to the I. C. R. R. Co? A. Yes sir, it would.

Q. How long was it after you came here, before that hole was gradually filled up and the shore extended over it? A. About five years. There were two years they cut ice out of it—1842-3 and 1844-5, and then it filled up here.

THE COURT.—Point out where the Government deed extended. A. I do not recollect exactly.

Mr. Joy pointed out to the Court the required boundaries.

Mr. WILLS.—State how it was that this hole remained open. A. I cannot tell the cause. It was open—I found it there.

Mr. WILLS.—Stretching northwards towards the pier, and southwards? A. Yes.

Mr. WILLS.—You say ice was cut out of it? A. Yes, for two winters, and the water carts loaded there.

Q. Was it surrounded by land? A. No sir; it was not surrounded by land—there was shoal water outside of it; it was deeper inside.

S. S. GREELEY, called by the plaintiff, being duly sworn, was examined in chief by Mr. WILLS, and testified as follows:

Q. [Presenting Greeley maps Nos. 1 and 2]. Were these maps made by you? A. Yes sir.

Q. Do you reside in this city? A. Yes sir.

Q. What is your occupation? A. Surveyor.

Q. What position do you hold now officially? A. I am, officially, city surveyor.

Q. When was this map made? A. It bears date September 22d, 1858.

Q. State how this map was constructed? A. This map consists, first, of the Government surveys of the south fraction of sec. 10, the river and the lake, etc., as made by

the government surveyors. Here is the west line of the south fraction of section ten, which is now nearly the center of State Street, starting at the center of Madison street, and running north. Here are Wall's meanders of the river, the crossing as noted by him, his meanders of the lake shore, with a correction which seemed to be required there. It didn't close without a correction. I found, in calculating the eastings and westings, that they didn't close, and therefore I changed the first course on the lake shore, starting on the south line of the south fraction of section ten. The first course given is south two west, and I found that to change to south, two east, would nearly close the map and make it correspond with itself. Either one of those courses changed will make the map close. Here I changed the second and third courses, which had the same effect. The incorrect line passed away up nearly through the centre of the Hospital, and into the inclosure, called the soldiers' barracks.

Q. Is that correction generally made by surveyors? A. I have heard it so stated. Mr. Bradley stated to me that he supposed that correction was due there. [The witness illustrated his meaning by the maps, pointing out the localities, tracing the lines of the various surveys, the meanderings along the river, the places where the correction of the erroneous line in the old survey was made by him, etc.]

THE COURT.—What difference does it (the error) make in the quantity of land? A. You cannot compute the number of acres because they don't close. It is just like having a partial boundary of a field. If you had but three sides of a field without the fourth, you could not make a calculation of the size of the field. Mr. John Wall was the original Government surveyor. The next thing was to plat on Talcott's survey of the sand-bar made in 1836 or 1837.

Q. [Notes and plat presented to the witness.] Is that the Plat? A. Yes sir. This was made from that apparently.

Q. State how you constructed that map from these field-notes? A. Mr. Talcott starts his survey of the sand-bar at a point 17 chains 30 links east from the south west corner of fractional section ten. That is now the centre of Madison street. He sums up the measure as given by Wall here, on the west bank of the river, making an off-



set to avoid the fort buildings, [indicating the courses and lines on the map.] The witness traces out several different lines on the map. His language, without the map would be wholly unintelligible.] Talcott's survey is laid down here. [Follows out Talcott's line delineating the bar and river.] He gives both sides of the river at the south line, both sides of the river at the north line, but he does not give any line between them. I have here merely sketched the side of the river between these points, taking a similar to this, and making it conform to it in shape. Talcott's notes are to where he comes across the river, and the west side of the river. [The witness pointed out the west line of lot 31, Kinzie's Addition, the location of various buildings and streets, the I. C. R. R. freight house, passenger house, M. C. freight house, hospital and fort, as they were at the time he made his survey in 1853; the position of the light house, Rush street bridge, the position of the Kinzie house, as given him by J. H. Kinzie, the position of Pine and Water streets and the shore line of Lake Michigan, as taken from what is called Snow's original map of Kinzie's addition.] This dotted line, running here, is the centre line of the river, as closely as I could obtain it, taking the actual position of the west side of the river, as shown by Wall's corrected notes, and taking the east side as located by Talcott at the north and south end, and running this line so as to pass evenly between the two; that would give the centre of the stream, as located from these data.

MR. JOY.—The centre of the stream at the north end?

A. Yes, the intervening part is simply shown as nearly parallel with Wall's line. The east side is assumed as being very nearly parallel, as rivers usually are.

MR. HOYNE—Is the line of the water lots there? A. I run the line between thirty and thirty one. Here is the angle of the pier as it then stood. That [pointing to the place,] would be lot 27.

Q Did you strike the bank of the river there? A. Yes, the east bank of the river. The west line of lot 27 would strike the east bank of the river if drawn across.

MR. LARNED.—You mean where it joined the sand-bar?

A. Yes sir; the west line of the sand-bar. The east line would strike the sand bar.

MR. JOY.—[Pointing to a line.] What does that line

indicate? A. That shows the shore of Lake Michigan, from a map recorded in book "H," page 375, Cook county records. That line shows the shore of Lake Michigan, from Book "A," page 311. I don't remember the date of that map.

MR. JOY.—That would be the outside of the sand-bar?

A. Yes sir; the lake shore and the outside of the sand-bar here.

Q. [Presenting Greeley Map No. 2] A. This map bears the same date, September 2, 1858, showing a portion of what is on the other map, but larger, and showing some details not on the other map. It shows merely the northern portion of the other map. It is merely an enlargement of the other map.

Q. Explain the map, the distances, profile, &c A. Here is a portion of the piers remaining. They were taking up the piers the last year. I then made an estimate of the amount of dredging and removing of the pier made by Martin Green for the city. This is the portion there remaining. The depth of this portion of the pier was stated as being from fifteen to eighteen feet. Is it not twenty-two?

A. No sir. Here is a profile from it, made by myself at the time, showing the depth from eighteen to twenty-two feet of this portion of the pier. There the pier is only about eleven feet high, and out here only from five to seven feet, in the light portions [indicating the points]. I mean the part where the pier was not so deep. The deeper part was from eighteen to twenty-two feet. Here is the position of some timbers, taken out by the dredge, apparently extending back from the pier south, put in to strengthen it—a sort of buttress.

Q. Is that located from an actual survey made by yourself? A. Yes, sir. I was there at the time, and took measurements. It is marked here "buttress-crib." This shows the position of some brush which the contractor found, but I did not see the brush; but he stated to me that brush had been found there.

Q. State the width of the river, according to the indications on the map there, along the pier line. A. Here is the distance given from Talcott's angle to the west bank, as shown by Talcott—three chains and seventy-nine links, or about two hundred and fifty feet.

MR. HOYNE—How wide is the deep part of that profile?

A. That corresponds very nearly with that. It is a little



less than that. This is a thing which could not be got within a few feet. From the buttress-crib, where Mr. Talcott makes an angle to the angle of the pier, at the time this was surveyed, is three hundred and fourteen feet, by actual measurement. Here is the deep hole in the channel of the river, described in the testimony in the Johnson case by Mr. Gamble. I don't know anything about it myself, but merely laid it down here from the report in that testimony. Here is a portion of the sand-bar remaining in 1837, as shown by a map of Capt. Allen—I believe accompanying a report to the government from him. That comes down here. Apparently it had been nearly all washed away. Here is Wall's meandering, here the east line of the sand-bar, by Talcott's survey, the same as the other map.

[The witness here took the maps, and at the request of the counsel, passed around among the jury, pointing out to them the minute details. The remainder of the direct examination of this witness was occupied entirely in tracing various lines, localities and surveys, and his language, taken by itself, would be utterly unintelligible. The *cross examination* was of the same character.]

MR. JOY—These meanders of the lake, running up to this point here, cross at this point, [indicating the place] and are still continued up through the rest of the section? A. Yes, sir; up through the township on the lake shore—I believe so.

MR. McLEAN.—In making the meanders running along water-courses or a lake, is it the custom of surveyors to take in every spit of land, or often run across them? A. They run along as near as convenient to the shore, or water-line, and where it is difficult of access, or where it is of little value, they run outside of it, and do not take it into consideration, leaving its meanders for the purpose of calculating areas.

MR. JOY.—Would it be usual, in locating a call, such as the mouth of a river, to describe it as half a mile from where it was? A. No sir, where it was given by metes and bounds.

MR. McLEAN.—Suppose it was a survey of a piece of land two hundred feet wide, running out here, would it be the custom of surveyors to run right across it there, if it was of little value at the time? A. That was frequently done on bottoms and rivers.

MR. McLEAN.—I understand the meandering is made for the purpose of ascertaining the *quantity* of land, and not the boundary, and is only an approximate location of the

stream, and is not intended to give a rigid description of the boundaries? A. No sir, not at all; it does not give an exact description of the stream.

MR. JOY.—But where they locate a call, such as a rock or a tree, it is intended to be accurate? A. Yes sir; where they say so many chains and links, it is intended to be accurate.

MORGAN SHEPLEY re-called, and examined by Mr. WILLS.

Q. State the mode of construction of the south pier, and where the piles were put when it was built. A. I didn't drive any piles that year.

Q. Were any piles driven on the sand-bar? A. No sir; they were driven west of the sand-bar, all along in the river.

Q. No piles were driven west of the river; piles were driven in the river? A. In the river piles were driven; on the east—on the bar—there were no piles driven.

Q. Then, where piles were found in taking up the old south pier—what place would you say that was? A. That was the river.

HORATIO HILL, called by the plaintiff, was examined in chief by Mr. McLEAN, and testified as follows:—

Q. When did you first come to Chicago? A. I came here from the 25th of October to the 5th or 6th of November, some where along about that time, in '36.

Q. Do you remember noticing the situation of the sand-bar at the mouth of Chicago river, at that time? A. Yes sir; I recollect of seeing the debris of some buildings upon the sand-bar.

Q. You saw the wreck of some buildings on the bar? A. Yes, and some floating wood that had floated against some bushes that were on it. That is my recollection of Chicago then.

Q. [Presenting Greeley Map No. 1.] Look at that map. How far did the bar extend? A. The bar must have extended down somewhere to here.

Q. To what street? A. I don't know that the streets were laid out at that time: about here [indicating a point between Randolph and Washington streets] I was going to give you my impression of the distance. The distance must have been two blocks and a half down, I should think, from the south side of the pier. That was out of water entirely, I should think—I should think about to here.



That comes very near to Randolph street—between Lake and Randolph. That was out of water at the time I came here.

Q. Do you remember the width of the bar at that time?

A. Well, sir, all my impressions are something like the sands over on the North Side, now. It was up above the water. Some of it, on the south end, was evidently not so high as on the north end. The north end had been just dredged through, and my attention was particularly called to it, and I went down to see the vessel—the first schooner-rigged vessel here, called the Julia Palmer. It was of as much consequence then as the Great Eastern would be now to us at the East. Therefore I went down to the piers; but before I got down to it I found there was nothing but the piers (piles) to go on. I had to get down on my hands and knees for some distance, and come back without going clear down to the vessel; and that drew my attention to it particularly. But my attention was drawn particularly to the sand-bar by Mr. Moore, who was then, he said, either the owner, or was going to control it some way or other, and he thought it was a grand speculation. He had sold me some lots, and I had paid him a part—paid him a horse. I came across the country on a horse. I had the horse down in the stable, and he came down and looked at the horse. The lots were above this property, up here. That was what drew my attention particularly. He was then thinking that was going to be grand property.

Q. Were any bushes on it? A. There must have been. My recollections are, there was some flood-wood, such as usually flows out from the river at high water. It had blown up against that. I recollect seeing a building on there, some part, apparently, knocked away—the foundation, apparently, knocked away.

THE COURT.—What time was this? A. About this time—about the first of Nov., in 1836. I can date my being here particularly from some circumstances that took place. I was here the fourteenth of Nov., certain, and the twenty-second. It was during that time that I was here. I never had visited Chicago, nor have I visited it since, until 1853. At that time, I was here about a month. I came here with the idea of settling here, at the time. I should have done so, if it had not been for some sickness of my wife. That made it necessary for me to remain East.

Q. You saw Mr. Moore? A. Yes sir; the man I knew I think was Henry M. Moore. I could tell, but I could not have reference to my papers. They are in New York—they are all in New York that I took from him. He was a sandy-complexioned man, taller than I am, considerably.

Q. Was he a man of good health, or delicate health?

A. I don't recollect about that, particularly.

Mr. JOY.—You say that bar extended down very nearly to what is called Randolph street now? A. I should think, from my recollection, that it continued down some six hundred feet, or more—two blocks and a half, somewhere about that. I could not tell particularly.

Mr. WILLIS offered in evidence a Map marked "Map G., No. 52," by Col. J. D. Graham, U. S. Supt. of Lake Harbors. Col. Graham was unwell to-day, but would be here to-morrow, and this was offered in connection with Col. Graham's testimony, the counsel consenting.

Also, a Certified Copy of a Map of fractional section ten, township thirty-nine, &c., certified to be correct by Alfred Cowles, Register, July 19, 1850.

Also the deposition of STEPHEN A. DOUGLAS.

Mr. JOY objected to the form in which the deposition was taken, and also to the competency of the deposition as evidence.

THE COURT overruled the objection.

Mr. JOY proceeded to argue the question of the admissibility of the deposition generally.

Mr. WILLIS replied.

Mr. McLEAN followed, also for the same side.

Mr. BECKWITH for the defense, closed the discussion.

THE COURT took a recess until half-past two o'clock.

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#### AFTERNOON SESSION.

At the meeting of the Court, His Honor JUDGE DRUMMOND delivered the decision of the Court upon the question under discussion at the adjournment of Court, overruling the objection to the deposition generally, to which ruling the defendants' counsel excepted.

Mr. McLEAN proceeded to read the answers in the deposition of S. A. DOUGLAS as follows:

The said HON. STEPHEN A. DOUGLAS being by me carefully examined and cautioned, duly sworn to testify the



truth, the whole truth, and nothing but the truth, deposeth and sayeth as follows in answer to interrogatories. To the first interrogatory he saith : I have known Geo. C. Bates for nearly thirty years, and have been acquainted with the principal officers of the Illinois Central Rail Road Company.

To the second interrogatory he saith : I know the situation of the property alluded to. I am familiar with the early maps of the city, by which it appears that originally the mouth of the Chicago river was some distance south of the present piers, and the narrow strip of land separating the river from the lake, was by the old settlers called the "sand-bar." I never saw the sand-bar until after the piers had been constructed by the government, by which it was separated from the north shore, and the old bed of the river filled up, and a large portion of the sand-bar washed away by the action of the water, consequent upon the construction of the piers and the correspondent change of the channel of the river.

To the third interrogatory he saith : In examining the early plat and records of the city, with a view of satisfying my mind in regard to the title of my own property, I discovered the fact, which I had not previously known, that the channel of the river near its mouth had been diverted from its old bed by the construction of the Government piers, leaving a tract of land south of the piers, which once belonged to the north shore, but had thus become detached, and which at that time was nearly all under water. It occurred to me that the title of that land must still be in the owners of the lots fronting on the north pier ; that the title had not been divested by the construction of the piers and the consequent inundation of the sand-bar ; and that in view of the future growth of Chicago, that sand-bar, although then under water and deemed of no value, would at some day become of immense value, and if the title could be secured, it could be filled up or raised above high-water mark with the expenditure of an amount of money, which would be very small in comparison with its value. Under these circumstances, I made inquiries in respect to the original character and extent of the said sand-bar, and in regard to its then present owners, and satisfied myself that it belonged in a great measure to the then owners of the lots fronting on the north pier ; and I communicated all the information I had obtained to some friends,

and proposed to them, or either of them, that if they would secure the title, I would join them in the purchase.

To the fourth interrogatory, he saith :

All that I have stated above occurred prior to the grant of land by Congress to the State of Illinois, in aid of the construction of the Illinois Central Railroad. After that grant was made and the Illinois Central Railroad was chartered, and the Company had located the line of the road along the Lake shore, where it now runs, they commenced the construction of the road across my lands at Cottage Grove, and at the Car Works, without consulting me, or making any arrangements in respect to the right of way. A legal friend of mine in Chicago, knowing that I was absent from the city, instituted legal proceedings in my name against the Company, restraining them from constructing the road over my land, without first paying for the right of way ; and when he communicated the fact to me at Washington City, I thanked him for his kindness, but directed the legal proceedings to be dismissed, for the reason, that I was unwilling to stop a great public work, on account of my private interest, preferring to permit the work to go on, and to make an amicable settlement with the Company, when I should have an opportunity of consulting them in person. At a subsequent period (I cannot now fix the precise time) I called at the office of the Company in New York, and made an amicable settlement with the Executive Committee, in regard to my claim of damages for the right of way over my lands, at the Cottage Grove and the Car Works. After I had concluded my business with the Company, I stated to Mr. Schuyler, and the other Directors present, that I was apprehensive that they had not acquired a perfect title to all the land upon which they proposed to erect their Depots, on the south side of the piers, and east of the Marine Hospital—that while they may have acquired the riparian right along the shore of the lake, I was under the impression, that such title would not authorise them to build further into the lake than the centre of the old bed of Chicago River. I then explained to them how the river run before the piers were made by the Federal Government, and with a pencil, made a single sketch of the original shore of the lake, and of the old bed of Chicago River, and of the long point of land stretching down from the north shore some distance south of the pier which, in this deposition,



has been described as the "sand-bar." After making this explanation, I expressed great doubt, whether they could obtain a title to the land covered with water, which they proposed to fill, and construct the depot and other buildings upon it, without first purchasing the claim of Kinzie, or his assignees, who were said to be the original proprietors of the tract of land on the north shore. I stated to them, at the same time, that while I had not investigated the subject sufficiently to authorize a legal opinion, that it was necessary for them to extinguish the Kinzie claim; yet I had sufficient confidence in it, to be willing to become the purchaser of it, and that I had taken steps to purchase it, before they located their railroad there. Being unwilling, however, to interfere with their depot grounds, I assured them that I would not become the purchaser, and thus furnished them with all the facts and information in my possession concerning it, in order that they might submit the case to their attorney, and then act as the interest of the company might require.

To the fifth interrogatory he saith: I gave them no other notice of any outstanding claim or title to the land in question, than what is contained in the conversation referred to in my answer to the fourth interrogatory.

(Signed,)

S. A. DOUGLAS.

MR. JOY objected to the sixth interrogatory as immaterial, and the court intimated an opinion in accordance with his view, when

MR. McLEAN said he would not read that portion of the deposition, but reserve it, with the privilege of discussing it further during the progress of the trial, if it should be deemed necessary by the plaintiff.

J. MASON PARKER, called by the plaintiff, being duly sworn, was examined by McLEAN as follows:

Q. You are an Attorney at Law? A. Yes sir.

Q. You have been connected here with real estate titles as conveyancer? A. I have sir.

Q. Were you ever employed in your professional capacity by Mr. Hinckley in regard to some water lots in Kinzie's Addition? A. I assumed the agency of Mr. Hinckley's entire property in this State, in the summer of 1853.

Q. What time did you come to Chicago? A. In December, 1852.

Q. At the time you assumed that agency for Mr. Hinck-

ley, were there any improvements existing upon the Depot grounds now occupied by the Illinois Central Railroad Company? A. No sir.

THE COURT.—In what year did you commence the agency? A. In the summer of 1853.

Q. Who was it for? A. Samuel L. Hinckley, of Northampton.

Mr. WILLS.—At that time no improvements had been made upon the Depot grounds? A. Not that I am aware of.

Q. State, if you had anything to do in reference to the particular lots in Kinzie's Addition, which formed a part of this Depot ground. A. Among other property of Mr. Hinckley's, which was given to me to exercise an agency over and sell, after due instructions from him, were water-lots 31 and 32, in Kinzie's Addition. I was instructed by him, about that time, to offer them—31 and 32, in Kinzie's Addition—for sale.

Q. Did a portion of this land extend south of the pier? A. Yes sir, both north and south of the pier.

Q. What did you do under that authority? A. Those lying north of the pier I sold to Messrs. Beebe, Lyon & Co.

Q. What did you do with the portion lying south of the pier? A. I was then instructed by Mr. Hinckley to go to the Illinois Central Railroad Company, or their agents, and offer that lying south of the pier to them for sale—at \$3000, was the price fixed.

Q. What did you do, under that instruction? A. I sought, first, for Mr. Mason, the Chief Engineer—Mr. R. B. Mason, who was then the acting Superintendent, as I understood, of the road—the business man.

Q. Did you find him? A. I found he was absent from the city, in New York, with no particular prospect of returning for some weeks, being engaged on some other business.

Q. Where were the Directors of that Company's meetings held? A. So far as I know, sir—I cannot say I know anything about it—in New York.

Q. Were they held in this city? A. No sir.

Q. What did you next do? A. I went to Mr. Brayman.

Q. Who was he, and what connection had he with this road? A. Mr. Brayman, I understood at the time, was the attorney of the road—the I. C. R. R. Co. I stated to him the property which I had to sell, and which I had been instructed to offer to the Railroad Company—lots 31 and 32, south of the pier.



Q. Did you offer them to him? A. I did, sir. He replied that he would look into the matter—take the matter into consideration—and give me a definite answer some few days hence; that Mr. Mason was out of the city; that the Company had had many other claims of a kindred nature presented to them, and they had uniformly returned but one answer—in the negative; and that he supposed that that would be the answer that he would give me in a few days hence. He gave me no encouragement to expect anything else. He said that he never had heard of this particular claim, but the claims he referred to had been in lots in Walker's addition.

Q. Was Walker's Addition on this sand-bar? A. Yes sir.

Q. Did you tell him whether Mr. Hinckley had a title to these lots or not? A. I told him Mr. Hinckley supposed he had, and wished to sell them, whatever they were.

Q. Did you have any more conversation with him, at that time? A. No sir. I returned in a few days to his office, and then received the same answer, in the negative, that he had promised—that he had not examined very minutely into the claim; nor had, as I understood him, Mr. Mason; nor had he had any conversation with him, but that I had better not wait any longer, but take that as an answer. I told him I had other parties who were waiting for these claims, but that Mr. Hinckley had instructed me to offer them first to the Company.

Q. To give them the preference? A. Yes.

Q. Did you ever go to any other agent of the Railroad Company, after that? A. No sir; the matter ended there. I didn't deal with the Company afterward.

Q. Did you sell them afterward? A. Yes.

Q. Who to? A. To John S. Wright.

Q. Were these lots on the south side of the pier, a continuation of the lots on the north side? A. Yes.

MR. LARNED—Did you explain that to Mr. Brayman? A. Yes sir. I stated distinctly what the property was—a continuation of water lots 31 and 32 in Kinzie's Addition. Mr. Brayman was the regular attorney of the Company for that business.

Q. Did he act as such? A. I cannot say, any more than he was treated as the general attorney of the road; and so far as [concerns] the employees of the road, I saw them dealing with him, and he was so recognized among the gentlemen of the day and I never questioned his authority.

Q. Do you know of his ever acting as their attorney in Court? A. Yes sir, I have seen his name to papers, signed "Solicitor for the Illinois Central Railroad Company," I also remember of seeing in papers, not under his name and signature, copies of an agreement in a suit of the Northern Indiana Company, against the I. C. R. R. in relation to their crossing. A stipulation was finally entered into between the claimants in that case, and I remember seeing in the Democrat of this city, a copy from the Court Record, signed by Mr. Brayman, Solicitor, and Blackwell & Beckwith, Counsellors and Solicitors of the I. C. R. R. Company.

Q. Do you know anything about his appearing as attorney of the company, in condemnations of land? A. No sir, I did not. I should not have known of this if it had not been in the papers.

Q. You do not doubt but that he was the acting attorney of the company?

MR. JOY.—There's no doubt about it.

*Cross-examined by MR. JOY.*

Q. What price did you ask Mr. Wright for that? A. \$3,000.

Q. Did you get \$3,000? A. I got a part of it, sir, in cash; whether the rest was ever paid, I do not know.

Q. How much did you receive? A. \$500 in cash.

Q. Was not that all he agreed to pay? A. I do not know, sir.

Q. Didn't you do the business? A. No sir, I did not draw the contract.

Q. Don't you know whether that was all he agreed to pay or not? A. I do not know. The contract was given in my hands all drawn up, and only for him to sign.

Q. Who gave it to you? A. Mr. Hinckley sent it to me.

Q. Did you observe how much was due on it? A. \$500.

Q. Was that all the contract specified? A. No sir. \$3,000 was the whole consideration.

Q. Did it specify the balance was to be paid hereafter, or what had been paid? A. To be paid hereafter.

MR. McLEAN.—What you meant to say by \$500 is you only know \$500 was paid in cash, and you don't know whether the balance was paid or not? A. That is it. It was a long contract, drawn up in Mr. Hinckley's handwriting, because he did the business.



Q. What stipulations were there in that contract? A. Well, sir, I could not tell you. I could not tell you them in detail now, accurately, for I do not recollect them. I do not remember reading the thing over but once.

Mr. McLEAN.—I suppose it was a written contract. They had better produce it.

Mr. Joy.—We cannot produce it. It is not in our possession.

Q. What stipulations were there in that contract, as to the payment of the prices? A. Well, sir—

THE COURT.—Where is the contract? A. I do not know sir. I have never seen it from that day to this. I gave it to Mr. John S. Wright.

Mr. Joy.—He has got it, probably, and he is a party to this suit.

Mr. McLEAN.—No sir; he is not a party to this suit.

Mr. Joy stated that his object was to prove that the balance of this \$3,000 was contingent upon the result of this suit.

Mr. McLEAN objected to any evidence as to the contract.

THE COURT sustained the objection.

Mr. WILLS.—[Producing the various Harbor Reports, which had been formally offered in evidence before.] read to the Court and Jury a series of extracts, from the successive reports of the U. S. Officers, in relation to the Chicago Harbor; letter from Lieut. Allen to the Secretary of War, dated Chicago, Ill., Feb 26, 1834; report of Sept. 30, 1834; report of Sept. 30, 1835; report of Sept. 30, 1836; report of Sept. 30, 1837; report of Sept. 30, 1838. All the above reports by Lieut. Allen. Report of June 5, 1844, by Maj. Turnbull. He also exhibited, in connection with these reports, Capt. Allen's map, as illustrative of his report, and Maj. Turnbull's map, as illustrative of his report. He also offered in evidence, "Talcott's map."

Mr. McLEAN proposed to introduce proof of the fact that it is the custom and usage of riparian owners on the lake shore, to wharf up their property, or build piers and wharves.

Mr. Joy objected, but was not just at that time prepared for the discussion of the question, having, in anticipation of another question, not brought his books into court.

It was agreed to postpone the discussion until to-morrow.

Mr. McLEAN stated that he understood, that he was informed by the other side, they would set up the fact of overflow, and from that argue the consequent loss of title by the plaintiff; and that they would object to the introduction of any rebutting evidence on this point, insisting that such evidence must be introduced by them in the first place.

Mr. JOY stated that he gave the plaintiff notice that there might be no surprise.

THE COURT (Judge Drummond), after some further discussion among counsel, said that the Court would not, in advance, determine the admissibility of evidence. It was for plaintiff to determine when he would rest his case.

Mr. McLEAN desired time to consult with his associate counsel before deciding.

Mr. BECKWITH renewed the objection he had previously raised (see page 2) to the deed of Moses Pritchard, assignee of Henry Moore, to Averill & Armstrong, dated May 22, 1857, and proceeded to argue the question at length to the Court; after which

Court adjourned until to-morrow morning at nine o'clock.

#### FOURTH DAY—SATURDAY, NOVEMBER 12, 1859.

Court met at nine o'clock. GEO. W. SNOW recalled by MR. JOY for further *cross-examination*.

Q. I was examining you the other day when your examination was postponed for a time about that sand-bar, and you were describing how it went away. Describe now how the bar went away.

MR. McLEAN objected to the question as not proper matter of *cross examination*.

JUDGE DRUMMOND, delivering the opinion of the Court, sustained the objection, stating that it was more a matter of form than substance; the defendants, however, might examine Mr. Snow further, with a view to explain any portion of his previous examination.

MR. McLEAN presented to the Court the following offer: The plaintiff now offers to prove that from general usage and custom along the borders of Lakes Michigan, Huron, St. Clair, Erie, and Superior, it is an unquestioned fact, that the owners of lands bordering on, and bounded by said



Lakes, have from the settlements of the country occupied their water fronts out to deep navigable water, to the exclusion of all other persons ; have filled them up and have constructed piers and wharves and quays thereon far beyond the waters edge of line, have aliened them, have enjoyed the exclusive right to fish on them, and have also in all respects used them as their own property, and without any special grant or legislative authority therefor.

Mr. JOY said that it was incompetent; but he would rather they would go into the proof than not, if it were competent.

Mr. McLEAN renewed the offer of such portions of the deposition of S. A. Douglas as referred to this point, the Court not having considered it specially in reference to anything except the statements of the deponent to the officers of the Company.

Mr. JOY objected to it as an improper manner of proving usage or custom amounting to prescription or law.

Some further discussion among counsel ensued, when—

JUDGE DRUMMOND.—I do not desire to be understood as overruling a kind of proof which I doubt your ability to make. I am not willing to apparently acquiesce in a state of facts which I doubt your ability to establish. I do not wish the Court to be placed in a false position, and to be considered as excluding this kind of proof entirely ; because I am not prepared to say, that if you could establish these facts, it might not, in some aspects of this case, be material. For example : “The plaintiff offers to prove that owners, from the first settlement of the country, occupied their water fronts, out to deep navigable water.” Now what does that mean ?

Mr. McLEAN.—Suppose we change that, and instead of “since the settlement of the country,” “since the establishment of commerce on the lakes ” ?

JUDGE DRUMMOND.—“Have enjoyed the exclusive right of fishing on them ;” I don’t believe you can prove that ; “and have also, in all respects, used them as their own property,” etc.; I don’t think you can establish that. But that is the only objection I have to it.

THE COURT (Judge McLEAN) suggested that the question might be postponed for the present. He was unwilling to give a decision, involving such important interests, without more examination.

Mr. McLEAN said he would waive the proof offered, for the present, and withdraw the offer.

MR. BECKWITH raised an objection to the deed from Samuel Hinckley to Samuel L. Hinckley, previously offered, (see page 3,) which was only a copy of the Record, without any certificate of the acknowledgment of the deed. He also raised an objection to the copy of the deed from Richard Patrick to Cyrus H. McCormick (see page 4), acknowledged March 28, 1853, to which acknowledgment he made two objections: first, that it failed to state, in the manner required by our law, where it was taken—tho town or city being omitted; secondly, that it failed to comply with the law requiring that when any deed or other instrument shall be acknowledged, before any Commissioner, before it shall be entitled to be used, recorded, or read in evidence, there shall be subjoined, or affixed to the certificate, a certificate under the hand and official seal of the Secretary of State, certifying that the Commissioner, at the time of taking said acknowledgment, was duly authorized, etc. He also raised an objection to the certificate of the Foreclosure of a Mortgage from Henry King and wife to Charles Butler, on the ground of irregularity in the proceedings; also, that Henry King had taken the benefit of the Bankrupt Law, at the time these proceedings to foreclose commenced, and no title had been here shown from the assignee in bankruptcy.

He took these objections now, going to the form of the documents necessary to complete the plaintiff's title. He would hereafter consider such questions as go to the fact of the conveyance.

MR. MCLEAN said the plaintiff's counsel would like to have time to examine these objections.

Agreed to.

MR. MCLEAN announced that the plaintiff would rest his case here.

MR. JOY desired to know, upon whom the burden of proof would lie, in reference to the overflow and disappearance of the sand-bar. He argued, that if the plaintiff had a right to recover the property in question, it must be because it had washed away under such circumstances as reserved in him the right to reclaim it, and these circumstances must be shown by him. To such proof he should object, if offered as rebutting. If the plaintiff rested his case here, he desired an intimation from the Court, upon the question, as to whether the plaintiff would be allowed to introduce such proof, after the defendants were through.

JUDGE DRUMMOND said the Court would not decide any question, before it arose in the course of the trial.



## DEFENDANT'S EVIDENCE.

COL. R. B. MASON, called by the defendants, being duly sworn, was examined in chief by MR. JOY, and testified as follows :

Q. Do you live in Chicago ? A. Yes sir.

Q. How long have you lived here ? A. I have lived here more or less since the spring of 1851.

Q. Did you come here as Superintendant of the Illinois Central Railroad ? A. Yes sir.

Q. You constructed that road ? A. Yes sir.

Q. Did you have charge of their works here in this city ? A. Yes sir.

Q. The depot grounds, the construction of the pier and breakwater ? A. Yes sir.

Q. Can you tell when the expenditure of money began along that lake shore there, on the breakwater, and the construction of the works ? A. It commenced in the summer of 1852.

Q. Were they going along very rapidly, after that in their expenditures of money ? A. Yes sir, in the latter part of 1852, and during 1853, there were very large expenditures.

Q. Can you tell how much money has been expended upon these depot grounds, about what time it was expended, and how the work progressed ?

MR. McLEAN objected to the question, as calling for irrelevant matter.

MR. JOY stated that he would connect this evidence with proof of the fact, that Mr. C. H. McCormick, whom he would show to be a party interested, was cognizant of these improvements, during their whole progress, and failed to notify or inform the defendants of the existence of his claim ; which, MR. JOY contended, was evidence of fraud, and fatal to the plaintiff's title.

JUDGE DRUMMOND said it would be improper to go into collateral issues, which would consume the time of the Court uselessly ; but there would be no objection to a brief

statement of the fact, that large expenditures had been made on the land in question ; such evidence being, of course, subject to the plaintiff's objection.

MR. JOY stated that he would be brief, and that he would connect this with other evidence, bringing Mr. McCormick into the case.

MR. McLEAN asked for the benefit of an exception to this ruling.

Q Please state how long the works were going on, when you began, and whether they continued ? A. The works commenced in the summer of 1852, and continued up to the time I left the service of the Company in Oct. 1856.

Q. I don't want you to state accurately, but can you state approximately, how much money has been expended there ?

To this question the plaintiff objected, which objection was overruled and an exception noted.

A. North of Randolph street, I think there had been expended a million and a half of dollars.

Q. How much upon the breakwater south of that ? A. About \$350,000, south of that, I think.

Q Do you know when the contract was made with the city, by which they came in ? A. It was made on the 14th of June, 1852—at least the Ordinance was passed at that time.

Q. And was subsequently accepted by the Company, and became a contract ? A. Yes sir.

Q. Were you Supt. of the I. C. R. R. during all that time, Col. Mason ? A. Yes sir.

Q What was the condition of that place when the I. C. R. R. came there ? Was it land or water ? A. It was all water where their buildings now stand.

Q. Take all that ground there inside of the breakwater, and outside of where the lake shore was in 1851, and what was its condition ? A. It was all water then.

Q. Do you know anything about how deep it was ? A. It varied very generally. When the breakwater was put in, the water was from eight to twelve feet deep.

Q. How was it on the outer side of the depot grounds, or the breakwater, on the lower side ? A. It shoaled up I should judge to four or five feet, as it approached the shore.

Q. Was it a gradual slope from the shore down, and a shelving bottom ? A. Yes sir, pretty regular from the shore to the outer edge.



Q. How was it at the government pier? A. The water was not so deep immediately after leaving the pier and alongside, but it got its depth pretty soon. It was a gradual slope off to the south line of the depot grounds.

Q. The water was not so deep at the Government pier?  
A. No sir. I think the slope was pretty uniform.

Q. From the pier southward, and from the shore outward? A. Yes sir.

Q. And at the outer breakwater it was twelve feet? A. Eight to twelve feet.

Q. Do you recollect how deep it was about half way from the shore to the breakwater on Randolph street, the outer line of the depot grounds, about half way between the main and the outer breakwater? A. I should judge ten feet.

Q. Did you use vessels to bring the materials there when you were building it—float right over it? A. Yes sir.

Q. How long was the negotiation pending with the city before the Ordinance was passed? A. There was more or less discussion upon this subject during the whole winter of 1851-2. I think the first formal application was made in May, 1852.

Q. Were all these things matters of discussion in the newspapers here? A. Yes sir; they were very much discussed in the newspapers at that time.

Q. Were you ever notified, or did any body ever make any objection to your taking possession, except the riparian owners? A. None but those on Michigan Avenue. Mr. Collins made objection.

Q. Were bills of injunction filed by the Michigan Avenue people to prevent your opening it? A. I think there was by Mr. Collins, and I don't know but Mr. Walker.

Q. Do you recollect about the Hydraulic Company? A. Yes sir.

Q. These were all on the lake shore? A. Yes sir.

Q. You had charge of these works? A. Yes sir.

Q. Were known here as the Superintendent? A. Yes sir.

Q. When did you begin to build? A. The work was commenced on the breakwater, in Oct, 1852. The materials were provided previous to that; but the work commenced in October.

Q. Were the stone carried there in scows—in boats over these waters? Yes sir—in scows.

Mr. LARNED.—You are sneaking of the breakwater?

A. Yes sir. It was commenced in October, 1852.

Q. And they were thus carried to the part of these grounds over these grounds, as you wanted them? A. Yes sir.

Q. What part of the breakwater did you first begin on?

A. I think we commenced at two points. I think we commenced on the north of Randolph street, and at some distance south of Randolph street. We commenced north of Randolph street, on the extreme outer break-water, and was commenced again I think that fall, peraps opposite Madison srteet

Q. The outer breakwater is the breakwater which includes your grounds? A. Yes sir.

Q. Were you openly at work that fall, and subsequently until the whole thing was completed. A. Yes sir.

Q. Were a good many vessels and boats about there? A. Yes sir.

Q. Where were your stone for this breakwater landed?

A. They were some of them landed from the south pier, and when the water was still, they floated them outside, and threw them in to fill it up. I think they were carried by the track there. Some of them I think were re-loaded from boats from the same side, when the water was still and taken around.

Q. Was there a large amount of timber loaded on the pier for the purpose of your constructions during all that time? A. Yes sir.

Q. Do you know where Mr. McCormick's works are on the north side? A. Yes sir.

Q. What is the relative position of that to the depot grounds? A. [Indicates the position.]

Mr. McLEAN excepted to the whole of the above testimony.

*Cross-examined by Mr. McLEAN.*

Q. You have said it was all water where the buildings now stand. Was there any place below the south pier where there was ground? A. My recollection is, that there was a little ground out nearly as far as the north end and west side of the I. C. R. R. freight house, in the rear of the Government piers.



Q. South of the south pier? A. Yes sir.

Q. What was the extent of that ground? A. Well, it came pretty much up to a point there at the place I named, and gradually widened as you went west from that point, until you came up to what I should call the main shore.

Q. Was there an acre or two? State the quantity?

A. The shore along Michigan Avenue was pretty uniform, until you got up to about Water street my recollection is, and then rounded a little off to the point I spoke of.

Q. Where did that point extend? A. To nearly the north end of the west side of the I. C. R. R. depot.

Q. What was the width of that land, taking the south pier as one side? A. The width was, I believe, from near Water street to the south pier.

Q. [Presenting Greeley Map No. 1]. Mark out about as you found it was. A. [The witness marked out the boundary desired.] This is inside. There was the grounds. The line was pretty uniform, until you got up to Water street, and then this rounded off.

A JUROR.—That was in 1852? A. Yes sir.

Q. How far from Michigan Avenue was the outside breakwater you have testified about? A. South of Randolph street, it is five hundred feet, I think—whether from the centre of the street, or the east side—I don't recollect exactly. I think that the breakwater is five hundred feet (distant) south of Randolph street.

Q. [Presenting a map to the witness]. Look at that map. A. It was made in my office. That is the breakwater, south of Randolph street, it is five hundred feet. Then up here is the outside breakwater.

Q. How far is that from Michigan Avenue? A. It is marked 684 feet—that would be 1074 feet.

Q. Then the outer breakwater is 1074 feet from Michigan Avenue? A. Yes sir.

Q. From Randolph street north to the south pier, what do you say was the depth of the water at this 1074 feet from Michigan Avenue? A. At that corner, there, I should say it was twelve feet deep, [indicating a point.]

Q. That is at the lower corner (opposite,) Randolph street. Go on to the south pier. A. It gradually shoaled up here, and within a hundred feet of the pier it was six to seven feet deep.

Q. At the extreme south east point, it was 12 feet, and gradually shoaled to six or seven feet, within a hundred feet of the pier? A. Yes sir.

Q. State how the water was, coming in towards the shore from the outside breakwater, within a hundred feet of the pier? A. It gradually shoaled up, where the freight house stands, it is that black spot, it was from four to six feet deep; on west, it shoaled up to nothing where that point was. [The point previously marked by the witness.] It was from four to six feet deep where present freight depot is.

*Direct Examination resumed by MR. JOY.*

Q. [Presenting the Map attached to the Deed from the United States.] Is that the tract of land which you describe south of the pier? A. That is about according to my recollection.

Q. Look at that line there. A. That is the shore of the Lake in 1852.

Q. What is that other line, there? A. That is the shore of the Lake in 1849.

Q. Is that the tract of land the I. C. R. R. Co. bought of the Government? A. Yes sir. Objected to.

MR. McLEAN—[The witness having again traced a line on Greeley Map No. 1, the first one having been erased]—I will ask you if this pencil line, as corrected by you, represents correctly the ground at the time you came there? A. Yes sir.

#### DOCUMENTARY EVIDENCE.

MR. JOY introduced in evidence the *Deed* from the U. S. Secretary of War to the I. C. R. R. Co., with accompanying Map, conveying a portion of Fort Dearborn Military Reservation, as therein designated; dated October 14, 1852; recorded October 28, 1854.

MR. McLEAN objected to it, on the ground (1), that so far as these premises were covered by it, the Government, having once granted the land to Kinzie, the United States patentee, could not re-grant it; (2), that the Secretary of War had no authority to make the grant under the Act of Congress under which he purported to act.

Objection overruled, and plaintiff's counsel excepted.

MR. JOY offered in evidence a *Report by Capt. Howard* to Brig. Gen. Gratiot, U. S. A., dated September 24, 1830, of the original survey for Chicago Harbor, to which was attached a map, referred to as made in 1824.

Also, a series of Deeds from riparian owners, as follows:



Deed from Charles Walker to the I. C. R. R. Co., dated Nov. 24, 1854, for lots 1 and 2 in block 6, Fort Dearborn Addition to the original town of Chicago.

Deed from Erastus Bowen to the I. C. R. R. Co., dated October 8, 1852, for lot 11 in block 5, in Fort Dearborn Addition to Chicago.

Deed of James H. Collins to the I. C. R. R. Co., dated September 23, 1853, for lots 9 and 10 and the south half of lot 8, in block 5, in Fort Dearborn Addition.

Deed from The Hydraulic Company to the I. C. R. R. Co., dated May 1st, 1854, for lot 6 in block 6, in Fort Dearborn Addition.

Deed of George Smith to the I. C. R. R. Co., dated January 7, 1853, for lots 6 and 7 and the north half of lot 8, in Fort Dearborn Addition.

Deed from F. C. Sherman to the I. C. R. R. Co., dated Sept. 25, 1852, for lots 3 and 4 in block 6, in Fort Dearborn Addition.

Deed from E. H. Hadduck to the I. C. R. R. Co., dated June 23, 1852, for lots 2, 3 and 4 in block 5, and in block 11, reference being had to the plat for description.

Deed from Isaac Cook and wife to the I. C. R. R. Co., dated November 25, 1854, for the north half of lot 5 in block 6, Fort Dearborn Addition, being 22 feet in width, etc.

Deed from Buckner S. Morris to I. C. R. R. Co., dated March 5, 1853, for south half of lot 5 in block 6, in Fort Dearborn Addition.

Deed from Luther Rossiter ; consideration \$15,000 ; dated January 23, 1855 ; to the I. C. R. R. Co., for east half of lot 1, block 11, in Fort Dearborn Addition.

Deed from S. B. Cobb and M. M. Cobb (wife) to I. C. R. R. Co., dated July 2, 1852, for lot 6 in block 11, Fort Dearborn Addition.

Deed from J. Y. Scammon and wife, dated June 19, 1855 ; part of lot 5, block 11, in Fort Dearborn Addition.

Also various Ordinances of the City of Chicago, relative to this breakwater.

MR. McLEAN objected to these documents, but said he would examine them further, his objection pending.

MR. JOY offered the order of the Secretary of war, directing a military reserve to be made at Fort Dearborn ; dated Sept. 30, 1824 ; enclosing a letter from Dr. Alexander Wolcott, Indian Agent.

Also, a statement of the Commissioner of the Land

Office, relative to this sand-bar ; dated, April 4, 1838 ; to the Register and Receiver at Chicago.

MR. McLEAN objected to these documents ; objection pending.

MR. JOY offered also, a letter of instructions, by Brigadier Gen. Gratiot, to Capt. Howard, directing him to make this survey already introduced ; dated Sept. 9, 1829.

Also a deed or contract by and between Geo. C. Bates, of the city of Detroit, by his Attorney-in-fact, John A. Wills, and Cyrus H. McCormick ; reciting the deed from Mr. McCormick to Mr. Wills of the same date, and McCormick's contract with Mr. Bates.

MR. McLEAN objected to them, as immaterial to the issue.

After argument, the COURT decided to admit them, subject to exception.

MR. WILLS raised the objection, that the document purported to be the act of an Attorney, when no power of Attorney had been shown.

MR. JOY offered in evidence a power of Attorney from Geo. C. Bates, constituting Jno. A. Wills, of Chicago, his Attorney, to negotiate with Cyrus H. McCormick, for the conveyance of the land he may have south of the south pier, commonly known as the sand bar, on such terms and conditions as may by him be deemed proper, &c. ; dated, Sept. 3, 1857.

MR. WILLS withdrew his objection.

MR. JOY offered in evidence, a contract between Geo. C. Bates and John A. Wills, Cogswell Green and Alex. Lawrence ; dated, Feb. 25, 1857 ; which he offered for the purpose, (1) of defeating the jurisdiction of this Court, if deemed necessary by the defendants, and (2) to show a joint enterprise among the parties mentioned for the object specified, and that Geo. C. Bates was a mere trustee.

Also a contract between Geo. C. Bates, and Thos. Armstrong and James Averill, the Attornies of Mrs. Moore, dated, May 22, 1857.

MR. McLEAN objected to both these papers.

The objection to the first of the two papers was sustained ; the other objection pending.

THE COURT having instructed the jury as to their duty, adjourned until Monday morning, at half past nine o'clock.



## FIFTH DAY—MONDAY, NOVEMBER 14th, 1833.

THE COURT met at 9 o'clock, pursuant to adjournment.

Mr. LARNED replied to the objections previously raised by Mr. Beckwith (see pages 4 & 72) to various documents forming parts of the plaintiff's title.

Mr. BECKWITH rejoined.

THE COURT said they had not yet had an opportunity of examining the title papers in question, and would take them under advisement.

Mr. McLEAN stated, that if a decision upon this question, as to matters of form in the title papers, should be adverse to the plaintiff, he would ask to be permitted to rectify them in the course of the trial, as he might be able to do.

Agreed to.

The jury was now called, and the trial proceeded.

JUDGE J. D. CATON, called by the defendants, being duly sworn, was examined in chief by Mr. JOY, as follows :

Q. Judge Caton, where do you live? A. I reside at Ottawa, in this state.

Q. Did you ever live in Chicago, sir? A. I did.

Q. When did you first come to Chicago? A. In June, 1833.

Q. How long did you live here, Judge? A. Until the spring of 1839. The summer of 1838, however, I spent mostly out of town. My family was here, however. I was here as often as once a month.

Q. Were you familiar with the lake shore all that time? A. Yes sir, I was.

Q. Were you frequently down there, while they were constructing the pier, and subsequently? A. I was.

Q. Did you take any particular observation of the sand-bar along the coast? A. I noticed it very frequently, sir.

JUDGE McLEAN.—When were you here? A. I continued here from 1833 to 1839.

Q. Describe the manner in which that sand-bar wore away or disappeared. A. After I came here in 1833, the government—I think, perhaps, under the charge of Maj. Handy and some others—commenced constructing a har-

bar. They commenced building cribs during the summer and fall of 1833, which were laid across the sand bar, or nearly across it, on the north and south side, running on the south side right across the channel of the river. These cribs extended across the sand-bar—nearly across—and were left in that position at the end of the fall of 1833. In February, 1834, there was a pretty high freshet in the river, and early in the morning, one morning, the water and ice were coming down the river rapidly, and it commenced very early in the morning breaking over the bar. In the course of that day a large channel was cut through the bar by the river—cut through between the piers, across the bar, and above the south pier, carrying the sand with it into the lake. This may have closed up again and been opened again by the next freshet, but I will not be positive, for my recollection is not distinct upon this point. My recollection is very clear, however, because I was here at the time, and observed it with a great deal of interest, when it was carried out in February. I should think the channel was from fifty to a hundred feet wide, in the course of a day ; you could see the sand fall in.

JUDGE MCLEAN.—Changing the course of the river?

A Entirely so.

JUDGE DRUMMOND.—What year was this? A. February, 1834.

Q. How far south of the pier was this sand-bar at that time? A. It was stretching down to what was then called the Handy house, where Maj. Handy lived, I should think. The sand-bar, at that time, or rather the course of the river—the old mouth of the river—was very nearly parallel with the beach lying west of it. The course of the river and the course of the sand bar would form an acute angle, because the sand-bar was much wider up at the bend than at the mouth. It was nearly parallel with the main shore. That was concave to the west, and gave a curvature to the river, somewhat. But the west line of the sand-bar, if I recollect, was nearly straight. This curvature, therefore, widened the river as you passed up toward the Fort. In the course of the spring of 1834 the old mouth of the river, opposite the Handy house, or nearly so—I may not be exactly right as to the precise location of the mouth of the river—closed up so that you could pass from the main shore, dry-shod, up to the pier. That was early in 1833 or



'34. My speculations were, that the sand, which had washed out between the piers into the lake, had, by the action of the current, which was then unobstructed around the east end of the north pier, been carried south, and filed up the mouth of the old river. Perhaps the extreme south point of the sand bar was widened, at that time, during the early part of the summer of 1834

Q. What was the subsequent history of it? A. The subsequent history of it is, that it sometimes widened by a heavy storm, and it flattened, my recollection would be; at other times it would wash away. The channel of the river was gradually filled up. The mouth of the river was filled up first, as I remarked before. This filling up, I may have ascribed to the wrong cause. It may have been to the washing away of the main bank; for the main bank was changed and washed away pretty rapidly, as well after the piers were constructed as before.

MR. MCLEAN.—The main bank of what? A. It washed away less rapidly as you approached the main shore.

MR. MCLEAN.—What do you mean by the main shore? A. That portion lying west of the bed of the old river, [points it out on the map] inside the sand-bar, I mean. This was washed away.

JUDGE MCLEAN.—The Handy House was the old Beaubien House? A. No sir, it was not the Beaubien House. It may have been, too. It was probably very near where Madison street now is. It was the lower mouth. This washing away of the old bank created a concavity in what I call the main shore. It began to be more and more concave. Originally it was pretty nearly straight when I first came here, but not entirely so. This concavity was there then somewhat, but apparently the bar had been attracted to that portion of the shore up near the fort.

Q. But it was wearing away? A. Yes sir.

Q. Before the pier was constructed? A. Yes sir. The evidence which impressed that upon my mind was the old Cemetery.

Q. What was there observable about that? A. It attracted my attention—I being a young man and not having travelled a great deal, nor having seen many awful things—to see half a dozen coffins sticking out of the bank and the bones hauled out and scattered on the beach.

Q. That continued until 1836? A. After almost every storm, if you would observe the beach, you could see that some were gone and others were protruding out—the foot of the coffins ; new ones would be exhibited.

Q. How far was that toward the harbor? A. Well, sir, I did not observe the distance particularly, but it was near Randolph street or Lake street ; not quite so far as Lake street, I think, that the coffins were exhibited ; I should think as far as Randolph street. I should suppose, from my present recollection, without having had anything to call my particular attention to the distance, that the Cemetery would lie between Washington and Randolph, where this exhibition attracted my attention.

Q. Was there not a little swell of ground there? A. Yes, sir. The ground was higher at the beach of the lake, but I cannot say that the ground fell off immediately on the beach. I cannot say that there was a depression as you went north ; there was as you went south. There may have been as you went north. I do not recollect, but there was as you went south by the old flag-staff.

Q. State the action of the water on that old sand-bar.

MR. MCLEAN desired the Court to note an exception on behalf of the plaintiff to this testimony.

WITNESS.—My recollection would be that the extreme lower point, probably in the course of the year 1834, joined the land ; but I think it became again detached from the south fraction—from the government reserve.

Q. That is, there was a space of water between them? A. Yes, sir. I think that the mouth that had closed up in 1834 again appeared. That would be my recollection of it.

Q. When? A. In the latter part of 1834 it was open again. I think my recollection is pretty distinct that there was a distinct channel. The old river channel communicated again with the lake after it was closed up in the early part of 1833 ; and perhaps it was closed up and opened for half a dozen times. Changes were going on. Sometimes it would widen, and at other times it would diminish. It went on floating one way or the other ; but the general progress was to a diminution of the sand-bar in length and breadth.

Q And height? A. Yes sir, I think the diminution took place more observably in height than in length and breadth—the height of it diminishing before the width, I am satisfied ; because frequently channels were cut



through, leaving little islands, in 1834. They made their appearance towards the south point of the bar. It went away in this way—probably more from the action of storms. A storm would sometimes widen it, and sometimes diminish it; but if it widened it, it would be my inference, if I may give it—

MR. MCLEAN.—Facts, Judge, if you please.

JUDGE CATON.—My recollection would be, that if it would widen, it flattened lower down. It lowered during this whole time. The beach was widening from the old mouth of the river—the lower beach, upon which the surges rolled, was widening pretty rapidly. That is, the beach west of the sand bar was widening; but it widened more rapidly towards the mouth, than towards the Fort—I mean between the west bank and the mainland.

Q. The water used to break across that sand-bar? A. Yes sir, in every considerable storm, well up towards the pier, and it wore upon the mainland. This is what widened the beach as I supposed.

Q. That took place as early as 1833. A. Yes, in 1834 and 1835. I don't recollect that it was observed in 1833.

Q. Did the water beat across in 1833? A. Yes sir.

Q. Well up towards the pier? A. Yes sir, depending on the length of the storm and the height of the swell.

Q. Did it wear upon the main shore during the storm? A. Yes sir, it did. The main shore wore away pretty rapidly north of the end of the sand-bar; because all these coffins, of which I spoke were north of the south point of the sand-bar, and the fact of the wearing away was distinctly impressed upon my mind, because every visit I made I saw some new ones.

Q. Did that sand bar gradually wear away up towards the north, until it finally disappeared up at the pier? A. I cannot say when it disappeared. The last I remember seeing was in the latter part of 1838, when there was a considerable patch of sand lying against the south pier. It may have extended forty feet—may be not over ten, and may be fifty. There was a triangle of sand lying there, and, judging by the appearance of the water, there was considerable water in the old bed of the river; but as you progressed down, there seemed to be water coming across the beach.

Q. And the disappearance was slow and gradual during all that time? A. As I understand the meaning of that

term it did—that is to say. I don't know that I can say that, but in any event it was going until the sand there was carried away—that was the general effect produced upon it.

Q. That general effect was increased during a storm?

A. I think so; I don't think that during a calm, the sand was carried away much.

Q. How was it in dry weather? A. It may have blown away.

JUDGE McLEAN.—Did the wind sometimes blow the sand? A. Oh yes sir; the sand would drift about. The sand was a very light material, and along a little south of that it would be thrown up for miles down the lake in little hills. There were little juniper bushes, and around these it would accumulate; the same character of sand constituted this bar.

Q. You observed that bar a great deal? A. Yes sir, I did. Perhaps like other romantic young men I used to like to walk about the beach; and at that early day clients were not so numerous, but that I had abundant leisure for it. [Laughter.]

Q. At any time when you observed that beach, could your eye observe any perceptible wearing away? A. I never could—except where it broke through (between) the piers, and then you could see it carried right off.

Q. Was there any thing of that kind during the wearing away of the sand-bar? A. No sir.

Q. It was a gradual, slow wearing away? A. That would be it in my understanding of the term.

Q. No such thing as avulsion? A. No sir.

Q. It was a constant wearing away? A. I do not know what you may call a constant wearing. Let a strong north east wind blow twenty-four hours, such as frequently visited the lake in the latter part of the season, and there would be a washing away of the main land, until some of it above would drop over.

Q. It was a gradual undermining of it, even then? A. Yes sir, it would undermine it until a piece would drop over.

Q. Nothing of that kind on that bar? A. No sir, the waves and the winds would wash it up and the under current would carry it away; and so it would keep floating in this way, the one current washing up, and the under current



washing away; and in the progress of this the bar was washed away; hence the under current was the strongest.

Q. It was by that process it went away? A. Yes sir.

Q. Could any man by noticing the effect of a wave, notice any diminution produced by such a wave? A. No sir.

Q. Could he by a dozen waves? A. I don't think he could by observing a whole storm; because I have often observed the waves come up and with them 'drift would come up and go back, and the same thing was observable for miles down, by any whose fancy led him down there. It was action and re-action. The main swell would bring up sand, and the under tow would carry it back; but in the main it carried it back more than it brought up, because the bar washed away, but for the time being it was imperceptible. You could not tell by one wave nor by a thousand waves, whether it brought up more than it carried away.

Q. It was precisely the same as on this whole western coast? A. Yes sir, I suppose so. That seems to be a general physical fact, that seas coming upon a sand beach bring up the sand, the under-tow carrying it back.

Q. Is it not the same process as on the North Side now? A. Yes, I presume so. If you want my philosophy, I can give it to you.

MR. JOY.—We would like to have it.

MR. McLEAN.—Are you an expert?

JUDGE CATON—No sir. I am not very *expert* at anything. [Laughter]

Q. Do you know what is the prevailing wind on this coast? A. The north-east wind is the prevailing wind—the one that produces the effect upon the beach here.

Q. Does it affect the whole western coast alike? A. I should suppose probably it does, from the appearances I have observed in traveling along here. I have heard the remark that the shore now is much more concave than it was at that time.

Q. Was it not wearing away for the whole period of time you knew it, until the city was fortified? A. Yes sir; gradually, and regularly, and constantly, all the time, and that attack upon the main shore extended as far up as Col. Beaubien's old residence, probably, before the piers were built.

Q. You mean by Beaubien's where Mr. Collins used to live? A. Yes sir; just below where the old flag-staff used to be.

Q. It was wearing away gradually up to that point until fortified? A. Yes sir.

Q. You were not here when it was fortified? A. I don't think I was. It may be that some individuals had commenced fortifying as early as 1838, but I think no break waters were put in until 1839. After that individuals who purchased, began to fortify their lands, probably as far up as the Beaubien lot, where Mr. Collins commenced fortifying, either to prevent washing away or for some other purpose.

Q. Are not the fall winds here pretty heavy? A. Yes sir; generally heavy gales in the fall, in September.

Q. And generally blow in the same direction? A. The north-east winds are those we observe most here, because they produce the greatest disasters, or the greatest impressions. We have very strong westerly gales—as strong, perhaps, as the north-easterly gales, but we do not observe their effects.

Q. How high was that bar, when you came here, south of the pier? A. Well sir, it may have been from three to five feet high.

Q. Higher up at the pier, and it grew less as you went south? A. I know I landed here in a yawl. I came over in a schooner and we landed in a yawl. I should think it was from three to five feet high. I landed on it, and passed over it when I first landed. I landed right opposite the mouth of the river.

Q. As it is now? A. Yes sir, or opposite the bend, where it turned south—where it then was, and I went back to the vessel. I had some sick friends I landed on the beach.

Q. Was it a naked bar? A. I have no recollection of seeing any vegetation on it whatever, south of where the pier is. It seemed to be formed by the action of waters from the lake. That would be my speculation upon it sir.

Q. Do you recollect whether it had diminished in height during 1833-4 and '5? A. It had somewhat, very considerably.

Q. Have you any impression how high it was in 1835? A. My recollection is after you got some 100 or 150 feet



below the pier it got low, and in 1834, certainly in 1835, it became so low that there were channels cut through it by the action of the water, and they were filled up again, and this occurred several times, I should think during 1834 and '5 and '6, as it progressed toward the north, diminishing towards the north, these channels were anticipating the disappearance of the sand-bar from the south—they leaving little islands where there would be a low place; and the wind would blow the sand in and fill them up. Then perhaps another gale would come on, and the islands would form again. I think the struggle was kept up between the wind and waves in that way—perhaps from some portions being a firmer material than others.

*Cross examined by Mr. McLEAN.*

Q. I understand you to say, that, in your opinion the calm and placid action of the lake, did not wear away the sand-bar, but it was worn away in storms, from time to time, as these storms occurred? A. I think the storms had the greatest effect upon it. I think when there were no waves rolling they produced no effect upon the sand-bar.

Q. Have you not seen after a violent storm a visible effect produced upon the bar? A. I cannot bring to my recollection any storm, when I observed, after it had closed, that there was less sand-bar, unless it was these channels cut through. I cannot fix the time, nor did I ever hear anybody speak of it—that after a storm the bar was less; nor do I suppose from my recollection that any man could say so—unless it was these little channels.

Q. But you are satisfied from your observation that it was the violent storms that caused it to disappear? A. I am satisfied, from my knowledge of physical things, that a storm would wash away more than when there was no storm at all, and it was placid. My knowledge of physical things induces me to think so.

Q. You have said in 1834 and '35 and '36, it disappeared gradually. Was not the gradual disappearance during that time caused by storms, as you have stated it? A. Yes sir, I have no doubt it was the storms that acted upon it.

Q. Had you any knowledge of that sand-bar previous to the construction of the pier? A. Oh, yes sir.

Q. Was it not a fact that the sand-bar increased in size previous to putting the pier across that bar, from the action of the water? A. I cannot answer whether it did or not.

I cannot call to my recollection whether it ever diminished by the action of storms before the construction of the pier or not. I do not know that it did—that it increased or diminished.

Q. Was it not a fact that at the first, it was three to five feet high, and there was no diminution of it until the pier was put through. Would it not convince you that prior to this time, the tendency of the waters was to preserve it, as afterwards it was to carry it away? A. I do not know that my pyhsical deductions upon this point would be worth more than those of any other man.

Q. We have heard your opinion? A. If you want my opinion, it would be this, founded upon my observation—that before the pier was erected, sometimes a storm might diminish it, and at other times increase it. I don't think that for the ages it had been rolling there, there had been any great or constant increase. Otherwise, it would have been much larger. If there had been an increase, even very minute, during all the ages this lake and river have been rolling, there would have been a very large bar there. I therefore infer—as you desire my deductions—that the bar sometimes increased and sometimes diminished by the action of the waves, before the pier was constructed. But prior to the erection of the piers, it continued to occupy a permanent position as a spot of land. I cannot say I observed any particular change in it.

Q. Was it connected with the main shore north? A. Yes sir.

Q. And from three to five feet above the surface of the lake? A. Yes sir, I should think so—perhaps not over two feet. I never surveyed it, nor went across it to determine how high it was; I should think the waves broke over it, if not as high up as the present mouth, very near it.

Q. As high as the angle? A. I cannot be positive about that. It would depend upon the height (of the waves.)

Q. Would it not depend on the storms? A. Yes sir. The higher the storm, the higher the waves.

Q. The waves now break over on the lake, north? A. I have not been over there. The waves frequently broke up and the spray dashed up on the main land. You might stand by the Cemetery, because that was the common place of visiting there, and if you stood right upon the bank, the spray would frequently moisten you.



Q. I ask whether the disappearance of the bar in your judgement, is not attributable to the erection of the piers, and changing the mouth of the river from the old mouth to its present mouth? A. Yes sir, I should think it would be. It might have disappeared without it. That that hastened it, I have no doubt. A visible change took place after that—that is, you could see a change—not from day to day, not from week to week, perhaps not from month to month, but from year to year you could see a change take place in the sand bar after the erection of the piers.

Q. These changes were always caused in your judgement by the violent storms? A. By the action of the waters and winds, sir.

Q. In violent storms? A. More generally so. If you would like me to express an opinion, the winds without the storms might agitate the surface and blow it over into the channel and into the lake; but I should think it was more attributable to the storms. It went away in a shorter time than if had been principally placid—if the water had kept it sufficiently moistened and if it had kept cool, it would have been there yet, some of it, I guess.

Q. When did you leave? A. In the spring of 1839. That is, I removed my family and changed my residence at that time. I have been here very frequently since, but not as a residence at all.

*Direct examination resumed by MR. JOY.*

Q. You speak of placid weather. How much of the fall and spring and winter is placid weather in this country? A. I don't know. We get a day, sometimes two days in the course of the summer.

Q. You speak of storms as contradistinguished from small blows. Placid weather is very rare? A. Well, sir, there is every gradation between them, and these are as imperceptible as the gradations between light and darkness when they are commingling. There is every gradation intervening between a placid sea and a raging storm.

Q. All these intervening gradations would be constantly at work on the sand-bar? A. Whenever there was a ripple on the sand-bar, I have no doubt it produced its effect. I suppose a wave three inches high would produce its effect, but not like those six, or eight, or ten feet high.

MR. McLEAN.—And these are the sort of waves you mean? A. If you understand me that nothing but storms rising six, or eight, or even four feet high, produced an

action on the bar, you misunderstand me. It was the action of the water on the sand-bar, more or less, that wore it away, and I have no doubt it was the action of the water when not more than three inches high. When it was three feet it would carry more, and when it was six feet it was still more; but in neither case so that you could see when the storm was over that it had diminished so many feet or so many inches. I don't think a man could have measured it by the eye, except these channels cut through, and then after a storm. I have noticed these little channels where some material would be more tenacious than others.

Q. And these would fill up? A. Yes sir, by the wind or waves. They would disappear in a few days.

Q. They were made by the action of the little waves rolling up in that way? A. No sir, I should think it was the big waves that cut these channels, I should think they generally appeared after a pretty heavy storm, taking the lighter portion away, wearing it away. That would be my deduction.

Q. Are there currents running down the western shore of this lake when the wind blows? A. Well, it has been my opinion ever since I have been familiar with the lake, that there is a current in the lake setting to the south on the west side, and to the north on the east side. The prevailing current--I cannot say it blows every day in that way, but my opinion is the prevailing currents are to the south on the west side, and to the north on the east side, that current was accustomed to carry down sand. The evidences of that current are exhibited now by the accumulations of sand on the north side of the north pier.

Q. On the south side of lake Michigan these sand hills accumulate to a great height? A. Yes sir.

Q. The running out of that pier to some distance, would prevent the sand coming down? A. Yes sir, that would be my deduction. Indeed if I am correct about the current it would necessarily be so; so that the supply would be prevented from coming down.

Q. The sea, therefore, does not roll up so much sand as before? A. If the sand that came from the north, could not come by the north pier, it could not be deposited on the sand-bar.

Q. The consequence was, the supply failed? A. Yes sir.

Q. It left it to the action of the water without any sup-



ply? A. Yes sir, my own deduction is, that the sand-bar and the main shore that was washed away, which has created the perceptible concavity in the main shore that was not there during the summer of 1833, where I should suppose it has been carried off hundreds of feet, for the Handy house was in my opinion a hundred feet east of the present main shore—that this material constituting the sand-bar, has found its way away down below the Round house. It was carried away by the under-tow as the waves broke it off the main shore and the sand-bar, until it reached this main current from the north and so was carried off south. That was my deduction.

MR. McLEAN.—Do you know what is the substratum of the soil? A. It is a tenacious blue clay. That anchorage ground there, is a very superior anchorage ground.

MR. JOY.—How deep under water is that, Judge? A. I don't know, several fathoms, after you get out a little way.

MR. JOY.—How deep under this sand-bar? A. I don't know.

MR. JOY.—Do you know how deep it cleared it away from the pier when you saw it carried through there? A. No sir, I don't recollect.

MR. JOY.—You are Chief Justice of this state? A. Yes sir.

ASA F. BRADLEY called by the defendants, being duly sworn, was examined in chief by Mr. Joy, and testified as follows:

Q. When did you come to Chicago to live? A. In the spring of 1836.

Q. How long did you live here? A. I have resided here ever since then; I have been absent for a year at a time twice.

Q. What was your business in 1836? A. Land surveying.

Q. Did your business call you upon that sand-bar during 1836? A. Yes sir.

Q. At what time? A. During June and July.

Q. Did you help make a survey here during June or July 1836? A. Yes sir.

Q. What was the object of this survey? A. To perfect a map and notes they required, of what was called Walker's Addition

Q. What was Walker's Addition? A. It was a portion of land cut off by the construction of the piers to form the harbor lying south of the harbor.

Q. The same land surveyed by Talcott in the spring? A. Yes.

Q. Walker claimed that under a float? A. Yes.

Q. Did you make a map of it, sir? A. I made a map of it and wrote out the field notes for the record of the survey.

Q. (Presenting map of Walker's Addition) Look at that map—a certified copy of a map in the Clerk's office. A. I believe that is a copy of the map I prepared for record under Mr. Bailey, who was County Surveyor at that time. That represents the sand-bar—the dry portion of it at that—the portion above water. This represents the bed of the river—the old bed—this the lake shore. That line is the old meander line made by the U. S. Surveyor when this country was run off into sections (indicating these lines on the map).

Q. Is that the line between the old government survey and Walker's Addition, fixed by Talcott or yourself? [Indicating] A. Yes. This represents the line of the survey supposed to be floated by Walker, meandered along the lake shore of Lake Michigan. Talcott's survey was in 1836. This line represents the lake shore [points out the various localities on the map].

Q. How high was this sand-bar when you made this survey? A. Varying from a few inches to a foot and a half.

Q. What made the variation? A. It was simply a matter of altitude.

Q. Was there anything there behind which the sands would lodge? A. There was sometimes a piece of drift-wood, and there would be a drift formed behind it. It was from a few inches to a foot or a foot and a half. The highest point was near the pier.

Q. How high was it, a hundred feet from the pier? A. May be a foot and a half.

Q. How high at two hundred feet? A. If run down to a few inches, varying with the change of the wind and the consequent rise and fall of the lake.

Q. There were times when it was a foot high. At other times it was submerged within two hours. That was caused by the rise of the water.

Q. Caused by the winds? A. Well I don't know whether it was solely caused by the winds. It was supposed to be.



Q. State whether that map showed accurately the lines of water? A. At the time that map was prepared for record, there were examinations made by me and put upon the map.

Q. State whether you made these lines, including the water lines, when the wind was blowing on or off the shore?

A. When it was blowing off shore.

Q. Was it to make as much land as possible? A. Yes sir, the object was to get as much land as possible—to make as good an appearance on the record as possible.

Q. Does that map represent land, half under water? A. That map would fairly represent the surveys of the ground as it appeared in June 1836, at the time the wind was off shore—the most favorable time of the water.

Q. State how large a portion of this land was above water? A. The front stakes above water were on the land, and the rear stakes were very few of them ever set. Some of them were attempted to be set, but they were never set. The water was too deep. It was a pretty hard thing to drive stakes in sand—particularly under water. There were stones at the corners of these lots.

Q. Both sides of the river? A. Yes sir.

Q. You say that when you were making the surveys, if the wind blew down the lake, or in shore, it would be submerged? A. Yes sir; it would be impossible to work these.

Q. How long did the stakes stay there? A. I don't know. I should not think there were many of them left now. They went one after the other. I never had a call to recognize them again.

Q. You were not here in 1856? A. No sir.

A JUROR.—What part of the sand-bar was so much submerged that you could not work on it? A. Three-fourths of the entire length of it, when it was a violent wind from the north-east; it would break over—you could no work. You could stay, but it was very unpleasant to work in the water.

Q. Do you recollect the houses on that sand-bar? A. There were two houses. One was a house I should think fourteen or sixteen by twenty.

Q. A light shanty? A. Well, it was what we call a balloon frame.

JUDGE McLEAN.—What is a balloon-frame? Not one that goes in the air?

MR. JOY.—Not quite, but almost.

WITNESS.—It is a light frame building, sided up in the lightest and cheapest manner. That is what we call a balloon frame. We used to build them.

MR. MCLEAN.—A common style of building? A. Yes sir; it is not entirely out of style yet—built of cheap lumber.

Q. Were there more than one? A. Yes sir; two houses. The other one was not as good a house. It was made of inch boards; I think that was the one south of it. I don't know whose that was—in fact, I don't recollect.

Q. Was that on this plat—on this map—or south of it? A. Well, it might have been. It was on this map, I think. It might have been south of Madison street. I did not notice.

Q. How high at that time were the foundations of these two houses above the water? A. The first one I spoke of was upon blocks, I think, eighteen inches square. There might have been boards to set the blocks upon. It was a little above the sand. The water would come up around the blocks when the wind was north-east. It did subsequently under mine the north-west corner of this building, and tilted it over towards the shore. The sand washed out under the blocks. I think the other was taken down and moved away. I don't recollect so much about it. I recollect going out and seeing this one's condition after a storm, which tilted it over in Oct. 1836. I was out on the sand-bar after that.

Q. How high was it at that time? A. It was part of it under water and part of it out of water. I came to the building after wading. It was part out and part in.

Q. It had the appearance of a little island? A. Yes sir. Sometimes this lake rose a considerable extent by the wind. It has had periodical rises. I have frequently known it to change fourteen inches in two or three hours. That is in the river.

Q. After a wind how long does it take it to subside? A. Sometimes longer and some shorter. I have never watched its declination so much as its advance. It usually subsided to an ordinary level.

Q. How long did you live here? A. I came here in 1836, and resided until 1849.

Q. What was the subsequent history of this bar? A. I know nothing of it prior to 1836.



Q. But subsequently? A. It went away—that was the history of it in short.

Q. In how long a time? A. It was gradually going away from the time I came to Chicago, down to 1837. In the summer of 1837 was the last I think I saw of it. In 1838 I think, there was some close to the pier, twelve or fifteen feet wide, and there were portions of it remaining in the spring of 1837.

Q. Was the water rising in 1837? A. Yes sir, it had advanced. From 1836 to 1838, it had changed in its mean level very nearly three feet. That was between the time I came here and 1838, when it was at its highest point, and higher than ever since, except it be this summer, it may have attained the same height. It is within a few inches according to my own observation.

Q. When did it fall off? A. It began in the spring of 1839, to fall off.

Q. Did you remain here? A. Yes sir, until 1848.

Q. When it fell off, did it attain its usual level? A. Yes sir.

Q. Did the bar then appear? A. No sir.

Q. When the wind blew off the shore, could you see it? A. Yes sir, just below the surface of the water I could see it.

*Cross-Examined by MR. McLEAN.*

Q. Who did you say you made this survey for? A. Amos Bailey.

Q. You represent this line to be the line according to the original survey, when this was laid off by the government?

A. Yes sir.

Q. Don't you know that that has been since corrected?

A. I know there is supposed to be a clerical error in the case.

Q. Instead of running west it should run east? A. I know it don't close with the section line at the north end of the section. I don't know of my own knowledge whether a change of that kind would correct the error.

Q. Is that line as you have it here, the old original line, [indicating the line]? A. Yes sir.

Q. And not the corrected one, if one has been corrected?

A. I don't know of any correction ever having been made by the proper authority.

Q. On the east bank of the river, did you make an ac-

curate survey of the line, or is it a sketch? A. That bank I didn't have so much to do with as this on this side.

Q. Then this you did accurately survey, and this [the east line] is not an accurate survey? A. I cannot say positively whether it is or not.

Q. Did you make an accurate survey of the bank of the river? A. Yes sir, I crossed over each side, both sides of the sand-bar.

Q. You made an accurate survey of where the water touched the land. A. Yes sir, there were stones planted at the corners, and the notes were prepared in such a way, that to prepare them, I had to go on the ground to get the full meaning of them.

Q. I understand you to say that the outside line is the line of Talcott's survey? A. I understand it so.

Q. This survey was made in 1836? A. Yes sir, it was an examination made previously and not recorded. I went on it to prepare the notes for record. It was made sometime prior to my visit to it in June.

Q. Did you find their water lines on the bar accurately represented, according to this survey in June 1836? A. That is my impression, that this line correctly sets forth the line of the water with the wind off shore at that time.

Q. When you find the difference between this and that line, [indicating the two lines representing the eastern bank of the sand-bar at two different periods] is the difference between your survey and Talcott's. Now what is that distance? A. The distance from the water line out to this edge is about forty feet according to the scale of the map. It is not marked.

Q. Where was the mouth of the river at that time? A. Down here, [indicating the point], this is Madison street.

MR. JOY.—Was there any mouth of the river at that time, at all? A. Scarcely; we could walk on the bar without any difficulty by wading a little.

Q. Did not this sand-bar disappear in violent storms, storm by storm? A. Well, my observation in relation to the sand-bar is this; it disappeared gradually by the action of both wind and wave, and the lake during the time it disappeared, while I was here in Chicago, rose about three feet, which would of itself submerge the bar without any other change whatever. It would become submerged and disappear, and its disappearing is mainly attributable, according to my observation, to the rise of the waters in lake Michigan.



Q. Then you don't think the storms did it? A. I don't think the storms made any particular damage to it, because if storms made any change, it certainly would have done so prior to that time.

Q. But suppose the whole conformation had been changed, as it had been, from the old mouth at Madison street to the present mouth, caused by artificial means, then might not your theory be wrong? A. Well sir, I ought not to propose a theory.

Q. If you had been told that that bar had been there from the first settlement of the country, and remained from the time pre-emption right to the time the piers were erected, and had not been washed away, what would be your opinion then—and the sand there had been constantly three to five feet high? A. My opinion would be the same in relation to its going away. I do not wish to be misunderstood. It is this, that the rise of the lake submerged and floated this sand in various directions, perhaps forward, and perhaps back into the old bed of the river—that the rise of the lake enabled the waves to blow across the sand-bar and against the bank of the main land, and it blowed against it and and wore it away, and washed out the coffins. After 1836 when I came here there was one or two washed out, how many more I can't tell.

Q. Was not that after storms? A. Yes, they always appeared after storms.

Q. Was not this house destroyed by a storm? A. It tilted over during a storm.

Q. Then the storm washed the sand away and tilted it over? A. Yes sir, it was the action of the storm.

Q. Has not that been the universal action of storms, visibly to wash away the bar? A. It would change its form, but not wash it away.

Q. Would not the winds, in a violent storm, blow off the surface and cause the water to flow over it? A. Undoubtedly.

Q. Is not the natural effect of that to wash it away? A. Undoubtedly it is. The winds had more to do with the bar than the water in causing it to disappear. The winds in the first place caused the bar. After the supply of sand furnished was cut off, the bar naturally disappeared, because it had nothing to make a supply.

Q. Then the building of the pier cut off the supply, destroying the bar? A. Yes sir, undoubtedly.

Q. Then, without the pier it would not have disappeared? A. I don't believe it would. I believe it would have remained.

MR. HOYNE examines.

Q. Do you recollect whether the high water of 1838 did not also submerge the foot of many streets here in some blocks? A. Yes sir; it flowed over the natural surface of the ground.

Q. Do you remember it backed up State street to Lake street? A. Yes, sir.

Q. Don't you remember they all set out to fill up and reclaim some land. A. Yes sir; the old sloughs that put in were filled. LaSalle also was flooded besides State.

Q. Do you remember the foot of Randolph? A. Yes sir; at the river the water flowed over the natural surface along the whole line. It raised to above what I call the natural surface.

Q. How long did it continue submerged? It was submerged occasionally for six months. I don't know. I know I marked on a post I had on the bank of the river to keep a record on.

Q. How much did it vary on the bank of the river? A. Frequently as high as fourteen inches in a single day. The city first filled up, and private owners in numerous instances reclaimed them from the river. Nearly all of them are filled. This year, too, it would have flowed up near the surface if the grade had not been raised.

MR. JOY.—Then the water flowed over the sand-bar, and then the gradual work of the winds leveled it? A. Yes sir; leveled it down to the bottom of the lake, and no sand being allowed to drift from the north, it remained so.

MR. McLEAN.—What is the sub-stratum? A. The sub-stratum is blue clay under the bar and all.

MR. JOY.—How deep underwater is it? A. I don't know how deep under water at that time.

MR. JOY.—Do you know how much sand there is now over the clay? A. No sir.

MR. McLEAN.—Do you know whether there is any sand over the blue clay there? A. I do not.



JAMES GRANT, called by the defendants, being duly sworn, was examined by Mr. Joy, as follows:

Q Where do you live, Judge? A. In the city of Davenport, State of Iowa.

Q. Did you ever live in Chicago? A. Yes sir.

Q. When? A. From April 1834 until June 1838.

Q. Were you here, then, while the piers were being constructed? A. I was sir. I returned in the fall of 1838, and remained until the spring of 1839.

Q. Whereabouts did you live and where was your office? You are a lawyer? A. Yes sir, I was and am now. When I first came to Chicago in 1834, my office was in a small room in front of what was then the Recorder's Office, opposite to where the north-west corner of the Lake house now is. It was not then built. That is on the north side of the river. After the Lake house was built, my office was in the south-west corner of that house, until I emigrated from the State.

Q. Were you accustomed to go out on the pier a good deal while it was building and afterwards? A. I was. I was very fond of fishing and I doubt whether there was a fair day in the time I lived here, after it was built that I was not there on the pier.

Q. You observed it? A. Yes sir, it was in sight of my office. I had to walk only four-hundred feet to get a full view of it, and I was there frequently fishing on it.

Q. Were you outside frequently in boats? A. Yes sir.

Q. What years? A. From '34 to '38.

Q. Tell us how that bar disappeared—in what form and manner? A. The sand-bar commenced disappearing after the north pier was built, which was in the summer and fall of 1834. I was very well acquainted with Lieut. Allen, who was Superintendent, and I was in his office frequently. It was in a warehouse, close by my office, belonging to John Kinzie—south of that. We formed an intimate friendship, and I was daily in the habit of seeing the progress of his work, and as he doubtless took as much pride in his profession as I did in mine, he loved to talk about it. The north pier was not commenced until July or August, 1834. When I came here in the spring of 1834, there had been put into the river on a line with the south pier some crib-work, the object of which apparently was to force the

channel out in a straight line, and there had been continued across the sand bar some two hundred and odd feet. I found it here; I have been shown Lieut. Allen's report, and you will find the time and manner in which it was built in that report. This had not accomplished its object and one pier had upset, and had left free access for boats to go out and down the old channel of the river, which was open in the spring, as has been testified to by Judge Caton, had been closed up, and shortly after I came here it was open again. That was the channel north of the south pier.

JUDGE DRUMMOND.—Judge Caton was saying there was a north pier in 1833.

WITNESS.—Yes sir, but my recollection is, he was mistaken: but I ought not to say the witness is mistaken. After the construction of the north pier and its extension out into the lake, the sand bar at first apparently widened at its lower end, and the mouth of the river as it was originally, would sometimes close up in a storm, and occasionally when the water was high and it would come out fast enough, it would open again; but the whole body of water south of the south pier, where the former channel was, slowly filled up, and the sand bar itself gradually disappeared. There was a portion of it left near the pier in the spring of 1839, when I lived here. It would sometimes disappear more rapidly than at others. The manner of the disappearance—the quantity of the disappearance—was not perceptible to my eye. If I was gone for any length of time, I would see there was a diminution, but at no time when I was looking at it, could I see there was a disappearance, and the entire bed of the river, until you come close to the pier, was filled up.

Q. How do you account for it? A. I account for it from the fact, that the winds throw the sand off the sand-bar into the river. When I lived here, the winds were prevailing from the north-east.

MR. LARNED.—When did it fill up? A. I cannot tell the precise time. It was gradual, beginning at the lower end. For the action of the pier—the diminution—would increase as the pier extended out into the lake. Lieut. Allen only built a few hundred feet the first year. The report will show that. That didn't have so great an action on the bar, as the one extended out further into the lake.



The further it was extended out, the greater was the effect. The sand-bar appeared first to widen at its lower extremity, and then commenced passing away along its whole length, except up near the pier itself. It commenced disappearing along its whole length.

Q. Did it grow narrower? A. Yes sir, that is my recollection.

Q. Lower in height? A. Yes sir, and narrower along the whole length. During the first season before the north pier was finished, there was formed at the end, when it rested, a sand-bar running in a parallel line with the old one, but extending farther out into the lake. There were several cribs at the outer end of the bar, that had all the sand washed away from under them.

Q. You speak of the action of the pier, Judge, what action do you imagine the pier had on this sand bar? A. I don't know that I am scientific man enough to undertake to give anything but the fact. I make no pretensions to science at all.

Q. As the pier extended out, the sand-bar wore away? A. Yes sir, that is it.

Q. You don't know whether it was stopping the supply of sand, or what it was? A. No sir, I could see the effect of a storm, that it would have some influence on it. It would drift the sand over into the river and diminish the quantity on the bar. I could see that this outer side of the bar was going away. It did not disappear from any cutting into it.

Q. But gradually along the whole length of it? A. Yes sir, that was the appearance to my eye, except as you get up near the south pier.

Q. Why did it not disappear there as well as below? A. I can only conjecture.

Q. Was it not sheltered by the pier? A. I think so, undoubtedly. Of course it was sheltered by the pier. The cause, coming from that direction, no matter what it was, whether wind or currents, could not strike it right under here.

Q. It staid there because it was sheltered there? A. Yes sir.

Q. The prevailing wind being from the north-east? A. Yes sir.

Q. And would naturally strike here and hit this all along here? A. Yes sir; you could see from the character of the waves as they struck on the north and south side, that the force of the current had been broken by striking the pier.

Q. How long was it wearing away? A. It was not all gone in 1839. I was here in 1842, and observed the lake shore protection at my brother-in-law's house, probably a mile south of this. I will not say whether there was any sand-bar there, but I know it was in 1839.

Q. At one time looking at the bar for hours or days, could you perceive any change, by the eye? A. No, sir; I could not, except that after a severe storm you could see a change had been made; but looking at it every day, you could not see any change. Taking a long period, you would observe a diminution. There was one occasion, when you could observe a considerable variation, where there were some shanties erected on it, and there came a very severe storm, which I think was from the south-west, instead of the north-east.

Q. Did it blow it or topple it down? A. It toppled it over. That was a subject of conversation the next day, that George Walker's or Henry Moore's shanty was washed away. They were contesting claimants for the property.

Q. When you came here, would the sea break over nearly the whole of that bar? A. It would at the lower part of it.

Q. How near the upper part? A. I could not say. It would break over the lower part.

*Cross Examined by MR. McLEAN.*

Q. I understand you to say that standing and looking at this bar in an ordinary day when you went out there, you could not see the bar washing away? No sir.

Q. But after a severe storm you could see it had been diminished? A. Yes sir, you could see there had been a diminution.

Q. Particularly after the severe storm in '36, when Walker and Moore's shanties were toppled over? A. Yes sir.

Q. Did you know Henry Moore? A. I did sir.

Q. What time did he leave here? A. Henry Moore left here, I think, in the fall of 1836. He spent one winter in Cuba, whether in 1835 or 1836, I cannot say; cer-



tainly as early as 1836. He went east to die, sir. I believe he was in very bad health.

Q. He was here after his trip to Massachusetts? A. I understood so.

MR. JOY.—Did you know his brother Reuben? A. No sir. I may have heard him speak of him.

MR. McLEAN.—You speak about the Moore or Walker shanty. Was Moore a claimant? A. Yes sir. I recollect all about it. I know Mr. Moore claimed it. Either he or Mr. Walker consulted me about it. They both claimed title. I knew both the men, and was consulted by one of them.

Q. Did you know whom Mr. Moore claimed under? A. He claimed under Robert Kinzie.

*Direct examination resumed by MR. JOY.*

Q. You stated that after a severe storm, you could perceive a diminution? A. Yes sir.

Q. Do you suppose a man standing during that storm for one hour, could see that diminution? A. I have no idea sir, that he could, for no man in his senses would go near enough to see it; but he could not see it.

MR. McLEAN.—He would have to go under water? A. Very apt to.

Q. How long did these storms continue? A. I don't know that it was longer than a day. It would be a very long one if it lasted more than forty-eight hours.

Q. What effect would moderate winds and waves have upon it? A. They would have some effect. The process was going on all the time in a gale of less degree.

*Second cross-examination by MR. McLEAN.*

Q. That was attributable to the erection of the pier altogether, in your judgment? A. Yes.

Q. The effect was, it did not go away before the pier, and did go afterwards? A. There was only a small portion there in 1838 9. Give me a map, and I will designate. I know a man is very much deceived by his eyesight. [Taking Allen's map.] I should think there was a slope in 1838, running along there. [Witness marks the outline with a pencil.] That was observable for a long time after the great bulk of it disappeared.

Q. Capt. Allen was an accurate surveyor? A. Sir, he does not require my testimony as to his ability.

GEORGE W. SNOW, recalled by the defendants, was examined in chief by MR. JOY, as follows :

Q. When you were on the stand, I was asking you about the disappearance of that sand-bar. State what you recollect about whether it disappeared suddenly, or slowly and gradually. A. Well, I should be understood gradually ; because, in 1833 it was there fully, and it was entirely gone, in—I don't know, but it must have been in five or six years.

Q. Where did it begin to wear away ? A. At the small end.

Q. Did it continue to disappear towards the north end until it was entirely gone ? A. I did not observe it particularly, so that I could say. I remember it at the time that survey was made, which Mr. Bradley has spoken of.

MR. WILLS.—Is it your own ? A. No sir. I never surveyed this. At the time these plats were put there, I knew of the fact.

Q. Did it disappear all at once, or any considerable mass of it, or gradually, by the action of winds and waters ? A. Gradually, for I do not remember any particular time when any particular amount went away.

*Cross-examined by MR. McLEAN.*

Q. Then, your idea that it gradually went away is, because it was there in 1833, and disappeared in 1836 ? A. No sir, I did not say so. It took five or six years. I am under impression there was some there near the pier as late as 1845. I should think so. I would not be positive.

Q. If it took five or six years for it to disappear, you would say that it disappeared gradually, no matter whether it disappeared from storm to storm, or by the daily action of the waters, although one storm might take fifty or a hundred feet ? A. If it is the fact, that it went off by fifty or a hundred feet, it is not gradual ; but I don't know it.

Q. Don't you know that after every violent storm there was a perceptible diminution of that bar ? A. That is not my theory.

Q. I did not ask for your theory, but to the fact you observed. A. It would not be so.

Q. You never have seen such a result take place after a storm ? A. No sir.



Q. Then, it made no difference at all? A. No sir; not to my observation, as to diminution.

Q. Neither in height nor width nor length? A. Not that I noticed.

Q. Then, no storm, in your observation, during the whole of that time, has at all diminished the height, width or length of the sand-bar? A. Not that I know.

MR. JOY.—You mean it was not observable by you at any one time? A. That is what I mean.

MR. JOY.—But during that whole time was gradually growing less? A. Yes sir; but not observable at any particular time.

MR. MCLEAN.—Is your memory very accurate? A. It is to certain things, and not to certain things.

Q. Is it to dates? A. No sir; it is to comparisons—when I have comparisons.

Q. Have you here any comparison? A. I have nothing to compare it to.

WALTER NEWBERRY, called by the defendants, being duly sworn, testified as follows:—

MR. MCLEAN.—Have you any interest in the I. C. R. R.? A. No sir.

Q. The Mich. Cent. R. R.? A. No.

MR. JOY proceeds with the examination in chief.

Q. You are not so bad off as that? A. No sir.

Q. When did you first come to Chicago? A. February, 1833.

Q. How long were you here during 1833? A. I was here a short time in February, and returned in the summer, and I think I remained here until the Indian treaty, and I think, until to October. Perhaps I spent two months, from August to October; my impression is it was 1833.

Q. When did you come here again? I was here during the subsequent year, 1834.

Q. When did you come here to live? A. 1835.

Q. How long were you here in 1834? A. I don't distinctly remember. I was here in autumn. I might have been here before. I recollect, however, returning here in 1834, in the autumn, and passing through here to Mineral Point, and being sick here, in the month of December, 1833, before I left.

Q. You know this sand-bar of course? A. Yes sir.

Q. I want to know the manner in which it disappeared from the face of the earth—did it go suddenly, or by gradual process? A. What I can state about the sand-bar is my general impression.

Q. State your recollection? A. My business was not to watch the sand-bar, and, of course, I cannot speak very distinctly about it; but, passing back and forward, I saw the bar there through a few years, and after the pier was built, the bar disappeared.

Q. Did it disappear by a short or a gradual process? A. My impression is, it wore away gradually. I recollect one particular storm, after some shanties were built—that perhaps affected it more than ordinary causes; that is, I believe the shanties were, by the action of that storm, tumbled down, and the common remark was, that the Addition they had laid out there was in danger of being carried away—Walker's Addition I believe it is now called. It was not carried away entirely by that storm; because I saw it afterwards; but it was damaged more by that storm than any other because that was a very extraordinary one.

Q. Do you recollect in which direction the wind blew in that storm? A. I do not.

Q. Do you recollect the taking down of these houses the next day? A. No sir, I do not.

Q. Did you ever know any period when you observed a diminution in that sand-bar? A. No sir. I can't fix it by dates, except the gradual wearing away of the sand-bar, after the pier was built, and its finally disappearing. I had nothing to call my attention. I think I have been on the bar. I came in from a schooner, and I came up the channel.

Q. How high was that bar above the water? A. That would depend on the state of the water. It is well known that the water changes with the wind. It was only one or two feet. It was higher in low than in high water. I think the general height of the bar was two or three feet, and possibly four feet when the water was low. When the water was low, of course, more than at other times.

Q. How was it when the water was high? A. Well, a foot or eighteen inches, and I should think, in a severe gale the water would wash over nearly the whole of it.

Q. Was that during the whole of your acquaintance with it? A. Yes sir; that was the general effect of storms upon it during the whole of my acquaintance. I suppose a



severe storm would make it diminish more than in ordinary times. The violent action of the water would make it diminish more than the moderate action of the water, but it was going all the time. My impression is, the supply being cut off, it disappeared.

*Cross-Examined by MR. McLEAN.*

Q Don't you know that in violent storms you could sensibly see the diminution in the amount of sand? A. If you confine me to what I know, I never went down to examine it—never looked at it. I only give what my impressions were, being a resident here, and passing by it.

Q. Could not large portions of that have been carried away in violent storms, and you not know anything about it? A. Yes sir, it might have occurred, and I not know it.

Q. Then, your impressions are formed from your observation, which is not so accurate, but that the bar might have gone away suddenly without your noticing it? A. I don't think it did. A small portion of it, just a small portion, might have gone away without my noticing it.

Q. Did not a portion of it go in the storm of 1836? A. I have stated that it went away faster than by ordinary circumstances.

Q. When you did see a sensible diminution? A. I don't know that I saw it, only I passed there, and saw the shanties were toppled down, and saw there was a diminution, but there was never anything to call my attention particularly. I give my impression as I casually passed and observed it.

Q. Without any particular observation? A. No sir, nothing to call my attention particularly. I have landed some vessels upon it, and come up the channel.

Q. Then, the diminution might have been gradual or sudden without your knowing it? A. I don't think a sudden diminution could have taken place without my knowing it.

Q. Why? Because you were in the city of Chicago at the time? A. Yes sir.

Q. Did not this storm create more attention, from the fact that it toppled down the houses? A. Perhaps so; because we thought the Addition was in great danger.

Q. Then, if the houses had not been there, although the storm had been just as great, you would not have noticed it? A. Possibly I might, or might not. I stated before it was only my impression.

Q. You are President of the Galena Railroad? A. Yes.

Q. And that runs right into the depot? A. No sir, not

now ; it did until to-day ; but now our regular trains run to the other side of the river.

MR. WILLS examines. Have you any recollection of the Petition to Congress, signed by the Mayor and Common Council of the City of Chicago, requesting the cession of Fort Dearborn to make a breakwater ? A. I think I have some recollection of it ; it seems to me so.

Q. [Presenting a volume] Look at the Petition, and see a letter of yours, urging the action of Congress upon it, and see whether the facts therein stated are correct. A. I think a letter of mine was with the Petition. This letter, I believe, accompanied it. My impression is, that this did not allude to the sand-bar, but to the action of the water on the main shore. I don't know whether the sand-bar had entirely disappeared. A portion may have remained there. I know action was taken by the city repeatedly to secure the shore down more distant, below. The action was much more apparent some distance down, than up here, near the piers. The action inside of this, near the piers, after the sand-bar was washed away, was, I think that it rather had a tendency to accumulate. I think I have heard Mr. Collins say that he had increased his lot considerably. The force of the waves did not strike the shore near the pier. This whole Petition, I think, related to the protection of the shore further down, and inside the sand-bar, and did not relate to the sand-bar.

Q. Is this a fact : “ But the construction and extension of the piers at this place have caused such a change in the action and effect of the waters on this shore of lake Michigan, that immediately on the north side, land is gradually forming, while on the south side, it is rapidly disappearing.” A. Yes sir, but that referred to the bank below there. The water took out a large portion by Mr. Gurdon's (?) house.

Q. Was that effect the consequence of the construction of these piers ? A. I have no doubt the construction of the piers had an effect upon the destruction of this bar. Undoubtedly that was a cause ; but in speaking in this memorial, it was of that which was below the sand bar.

Q. But this was a statement of facts for the action of Congress ? A. Yes sir, but we alluded to the land below this bar.

Q. But they are correct ? A. Yes, I think they are correct.

*Direct examination resumed by MR. JOY.*



Q. When did the city fortify the front of the city all up and down there? A. I do not recollect the year. Well, it has been done at different times, and different portions. First, there was some stone put in, and then another protection. The protection which extended along the whole front of the coast of what was then the city, if I remember, took place as late as 1850.

Q. Was a general tax levied on the city for that purpose? A. No sir, I think there were special taxes laid, but not collected. I think the expenses were borne out of the City Treasury. The question who was to protect the city, was matter of dispute. There was controversy, and there was an attempt to lay a general tax, and finally the expense was principally paid out of the City Treasury. In some cases it was collected and refunded.

Q. You spoke of the action of the water on the north side. Has it been forming there? A. Yes sir, considerable has formed.

Q. How wide is that from the main shore? A. Well sir, I do not know. There is perhaps five or six hundred feet or more, north of the piers.

Q. How far does it extend north? A. I think it extends nearly to Lill's Brewery, which is about half a mile; and it would possibly have extended further, but there is an obstruction there—the pier from the Water Works which stops the sand that is making from the north. If no other obstruction would be there, except the government piers, I think it would have gone further—perhaps a mile.

Q. Do you conceive that the running out of the pier has changed the current on this course? A. I don't know how it should, except as it affects the winds. Where the pier comes between the wind and the shore it would be a shelter; but how it should change the mode of striking the shore by the water, I don't know.

Q. Do not the waves strike the shore above and below in the same way, carrying them down until they come against the shore? Are they now as they always have been, except for the shelter? A. I never examined that. It may produce some effect. There may be something in Hydrotatics which would change the action of water by the construction of piers.

Q. Do we not have, every fall and spring, every variety of breezes, from the gentlest breeze up to a storm? A. Yes, very apt to.

Q. Would they not all affect that sand-bar more or less?  
 A. I should suppose so. When everything was quiet, it would be affected very little; but when there was a storm it would be affected much more, I suppose.

THE COURT took up a recess until 2 o'clock.

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AFTERNOON SESSION.

THE COURT met at 20 minutes after 2 o'clock, and the trial proceeded.

F. C. SHERMAN, called by the defendants, being duly duly sworn, was examined by Mr. Joy, as follows:

Q. Do you live in Chicago? A. Yes sir.

Q. How long have you lived here? A. I came here in April, 1834.

Q. Lived here ever since? A. Yes sir.

Q. In what part of the city did you formerly live? A. When I first came here I lived on Randolph street, just one block west; afterwards on the lake shore.

Q. When did you go to live on the lake shore? A. I would not be certain whether it was June 1842 or 1843.

Q. Did you live upon the property you have sold to the I. C. R. R. Co.? A. Yes sir.

Q. Were you ever engaged upon the pier and upon what is called the sand-bar—drawing nets and seines? A. In the spring of 1834, when I moved to this country, after I got to Detroit, my family went aboard a schooner, and I was here four or five weeks before my family got here, and I think that spring there was hardly a day I was in the city, that I was not down on the shore as many as two or three times, after two weeks. I was out of town a few days. I was constantly on the pier, being about there with a view of seeing if I could see a vessel coming with my family.

Q. Were you engaged in any business in connection with the pier? A. After my family came, myself and three other gentlemen built a seine for fishing.

Q. Where was that? A. In Chicago.

Q. What part of Chicago? A. We were in the habit of constantly fishing by the piers and outside of the piers, in what was called the old mouth of the river, until the sand-bar went off and disappeared. We fished with the



seine. I was formerly very fond of fishing, and we fished with the seine and hook.

Q. And you drew them out on the sand-bar? A. Yes sir, and on both sides.

Q. You were familiar with the sand-bar from the time you came? A. Yes sir; as familiar as any body could be, that did not take a rule and measure it. I measured it with the eye.

Q. From the time you came here, do you recollect how the storms used to beat upon it—whether they beat across it? A. In the spring of 1834, at times, pretty well down towards where the old mouth used to empty, the sea used to break across. Farther up, it did not break across so much, that spring or that season particularly not so much. It broke across occasionally, especially after quite a long dry spell, and the sand had been blown away by the wind, and the ebb and flow of the lake, if I might describe it so—not by a gale, because a gale was disposed to fill it up. But the ebb and flow of the lake, without any wind, would rise and fall, especially in the summer months—well, I never measured it particularly, but I should say from four to ten or eleven inches, perhaps half a dozen times in an hour. It appeared to be constantly in motion, rising and falling. When the water came up it would perhaps run over without any wind. In 1834, it generally ran over until pretty well down. In 1835, it ran once pretty well up towards the pier. In 1836, it went clear over until it got near the pier. It was constantly receding, both in width and height, from the time I became acquainted with it until 1837. It was not all gone then. There was some of the bank left next to the pier.

Q. How long did that remain? A. I think it was three or four years. I recollect drawing trout on it, I think in 1840.

Q. It was sheltered? A. Yes sir; it lay right close to the pier. Where it came out it was all gone. I think at that time it had filled, so that next to the south pier you could walk along the sand-bar clear the whole length of the pier.

Q. When was that? A. I think it was in 1840. I think it was so filled next the south pier the whole distance this way to where the first cribs were put in, that you could walk from the shore right out the whole distance on the sand.

Q. Then the old bed of the river had filled up? A. Pretty much. There may have been a little portion. I speak now of the old south pier as you come this way.

MR. LARNED.—From the end of it? A. No sir; from the place where the sand-bar was. That is my best recollection. I may be mistaken as to dates.

Q. State what became of the sand-bar and the old bed of the river. A. It was changeable, depending on the points of the wind. It sometimes seemed to have one effect and sometimes another. It depended on what point it came from. At one time it would form a bank down towards the old mouth of the river, and at another time disappear there. It was changeable, and didn't appear to be always alike—depending on the points of the wind, I judge, and which way the sea was rolling as to the changes of the bar. The bar had no vegetation on it, and appeared to be changeable. It finally filled up.

Q. How long was that sand-bar going away? A. Well, the greater part was gone in 1837—all but that close to the pier.

Q. By that you mean close under the pier? A. Yes; I recollect one time in drawing the seine, we had to be particular about the fish getting into the lake or the river. It had become so narrow in places—well, I don't know how many feet it was, for it varied, but the fish would flap up a little distance into the water—flap over into the water.

Q. State whether the process was a slow and gradual one, or was it a rapid one? A. Well sir, it was from 1834, but I don't recollect it in 1837. From the time I first became acquainted with the sand-bar it was constantly changing, until it finally disappeared. It disappeared gradually, from the fact that it was less and less every year, until it was all gone.

Q. Was the degree in which it diminished in any one day perceptible to your view? A. I could not say that it was in any one day particularly.

Q. Was it a continued process from the beginning to the end? A. Yes sir, it might change more at some storms. I recollect after some storms, in some portions there appeared to be still more of it, but that was at the lower end. I accounted for it by the fact that the water moved the sand down.

Q. Do you remember the defences along Michigan Avenue? A. Yes sir.



Q. When were they put up? A. I could not state.

Q. Do you recollect how they raised the money? A. I think a part of it was out of the City Treasury and part by individuals.

Q. How far up north did these fortifications extend? A. To about the foot of Randolph street.

Q. How far south, the whole length of that park? A. Yes sir.

Q. Something more than a mile? A. Yes sir. It was either by the city or by individuals.

Q. Do you recollect to have seen these coffins sticking out at the coast? A. Yes sir.

Q. How far north toward the harbor were these graves? A. Well sir, they were scattered along in different places. There seemed to be quite a number of these coffins—I say a number, several of them appeared to be between Randolph and Washington streets. There were graves still north of them, but I don't recollect of any north of Randolph street showing. There were stones indicating graves north of Randolph street, but I don't recollect any of them being washed up.

Q. What was the general character of that bar? A. The general character of it was there was no vegetation on it to my knowledge. I never saw any except leaves and things hove up on it by the sea. It was a bar of sand, what masons used to call "float sand," when we drew sand to make mortar. Bank sand is different from float-sand, because bank sand is more dirty; float-sand is washed clean. It appeared to be made sand.

Q. About what height was it when you first went on it? A. Well, I should say it varied. Perhaps immediately at the pier, where it was a little higher than fifty feet from the pier. Fifty feet from the pier it might have been three feet. May be only two feet. Below there it was, may be, a foot; many places it was not a foot.

*Cross-examined by MR. McLEAN.*

Q. Do I understand you to say, that the waters of the lake would rise and fall as much as ten to eleven inches, two or three times on hour? A. I intended to state that the ebb and flow of the lake would sometimes vary from four to ten or twelve inches. I only measured it by the eye.

Q. Do you mean twelve inches perpendicularly? A.

Yes, I mean perpendicular. The sea would run in, and would fall, I say, perhaps from four to ten or twelve inches. I never measured it.

Q. This bar disappeared between 1834 and '37? A. I think the last went off in 1837.

Q. You formed your opinion, that it gradually wore away as you state, upon this fact—that it took that time to disappear? A. Not altogether. In 1834 and '35 and '36 I was on that pier, more or less, and each year I found it less and less, until there was hardly any room, except at times it changed one way or the other; but generally it was so.

Q. During storms in these years, didn't it disappear perceptibly? A. Yes sir, I know it disappeared, more or less.

Q. Could you not see, after a violent storm, the effect it had by its diminution? A. At times I could, and at other times, depending on the wind, it changed from one end to the other.

Q. Do you remember a violent storm in 1836, when the houses were toppled over? A. I recollect when the houses were toppled over, but I don't remember what storm it was. I have been trying to bring my mind to remember it, but I don't remember which way the wind was.

Q. What was the effect of that storm in diminishing the sand-bar? A. The effect at the time the houses tipped over was, to take the blocks out, so that they tipped over.

Q. Did it not diminish the size and wash away a part of the sand-bar? A. I suppose it did. It took away the sand from the edge of the house, and left the house toppled over. The house was a short distance from the water, and the beach was rather low.

Q. Then I understand a portion of this bar would disappear sensibly during violent storms. A. I should say that, speaking generally, during the effect of the storm there was more disappeared, than when there was no storm at all.

Q. Was it not perceptible during a storm? A. I do not know that I could tell of any particular storm. I cannot speak definitely.

Q. Is it not impossible to speak definitely, because your attention was not called to it? But after the storms generally, was not that bar sensibly diminished? A. As you



ask me to explain, I will explain, for I had a good deal of a tussle with Lake Michigan myself, and I spent, I think, about \$3,000 at it. The immediate rise of the water had more to do with it than these storms. The immediate rise of the lake, whenever the wind blew at all, had an effect to take away really more than the gales.

Q. The water did rise very rapidly? A. I don't remember the year, but it rose very rapidly in the lake, but whether it was high winds I don't know, but the action of the water had more affect upon the sand-bar than any particular one storm.

Q. The water drove the sand off the top? A. That is my idea. I give it as my idea.

Q. Was there any diminution in calm weather? A. It seemed to be constantly changing. There were times when there appeared to be no wind at all one way or the other, when the water would run across from the lake to the river, and there would be a little channel, and perhaps in twenty minutes, there would be no channel. That was the ebb and the flow of the lake, as I told you. The bar was very low, and the water would come up, and as the water would come up it would run across, and as the water receded it would stop, and not run across, for some little time.

Q. Do you mean, when you say "gradual," that it was the effect of storm after storm upon it, that was wearing it away? A. I don't know that I can explain it better than I have done. I have stated that it depended upon the points of the wind and different storms had different effects. For instance, a storm from the south-east, or particularly from the east, would add to it. I mean to say, that the effect of the storm depended upon the point of the wind.

Q. What time was the north pier built? A. My recollection is, that in the spring of 1834 it was not built. I am very sure it was not; still I have not kept dates.

Q. Did not the building of that north pier cause the sand-bar to waste away? Did you, from your observation of the appearance of the sand-bar, before and after the pier was extended, observe that the extension of that north pier caused the washing away of the bar? A. I will explain that in this way—from my observation since I have been living on the head of this lake. I was not here before the pier was put up, but I refer now to the mouth of the Calu-

met, which is like this, and has a bar at the mouth, but that empties straight out in the spring, when I have driven across there. There is a bar formed between the lake and the main shore at the mouth. That place is twelve miles from here, and just like this, only there is no pier there. I have no doubt in my mind that this was like that, and at times the bar might be hove entirely ashore; then the lake would recede again, and this would form again, because it was formed entirely by wind and water.

Q. Then where there is a pier, it destroys this land? A. I have no doubt if the pier was taken away, it would re-form again. The water again would wash it out, and then it would re-form again. I never measured it at the Calumet, but I have fished there. I have been there when the bar below was all broke through (?).

Q. [Presenting a map of the Calumet to the witness] Is that a correct map of the Calumet? A. That, perhaps, is a very fair representation of our bar here, if there was no pier across, and I have seen the times when this river emptied straight out, but then, when the water receded, it would run around here again—around the bar here—and it appeared to be changeable.

Q. You spoke of a rise and high water in the lake at that time—at the year of high water—was any land belonging to the city overflowed? A. There was a good deal here cut off.

Q. Did you fill it up again? A. I don't know as they did. They undertook to protect it.

Q. At State street did not the lake, at the time it was so very high water, overflow the foot of that street? A. I don't remember the year the lake was so high. I think it was in 1838. As I recollect, I was building a block of buildings on Lake street, immediately north of us. There were times when the water set back in the ditches, but it didn't overflow. It came from the surface, and stood in the ditches next to the river and out back. At Randolph street bridge, it set back. My recollection is that it stood in the ditches.

MR. HOYNE.—Didn't it come over the ends of the street? A. Perhaps it might. I don't remember of ever driving through water in the centre of the street.

Q. Is that filled up or reclaimed? A. Yes sir, our streets are generally filled up.

MR. HOYNE.—Has not the river been extraordinarily high this year? A. Yes sir.



MR. HOYNE.—Don't you know it covered some lots on Market street this year? A. I think I have known one instance it has been so high as to set back over the old surface—not a great distance back over the lots.

*Direct-examination resumed by Mr. Joy.*

Q. You speak of the Calumet sand bank, and say the river used to run across there? A. I have been there when the water ran almost straight out.

Q. What became of the bar afterwards? A. At times it was east and south of the river—perhaps it was more east than south—and that would be hove ashore by the action of the wind and waves, and then as soon as the water went down in the river, the action of the lake would heave the sand right down to the shore and build up another bar.

MR. McLEAN.—It would turn back to its old course? A. Yes sir.

Q. What portion of the time is the water perfectly still here? A. A very little portion of the time.

Q. There is almost always a breeze of some kind? A. Yes sir, I spoke of the water changing in this manner when there was no breeze at all of any account.

Q. Would not the small waves of the lake affect that sand-bar in some degree? A. I explained that as near as I could by saying that when we had no storm for a long time, and the wind was pretty strong it served to remove a good deal of dry sand from the top, and in removing it made it so low that the water from the lake would drive over and make these little channels. That was my knowledge of it. It kept constantly wearing it away.

Q. They have asked you about its going away sensibly. Do you suppose if you stood an hour and watched the winds and waves, that you could by the eye measure the effect? A. I don't think I could stay there in a storm.

Q. Was there any other time when by watching it, you could perceive any changes? A. No sir, there was no time when I could perceive any.

MR. McLEAN.—You never tried it? A. No sir.

Q. What was the appearance of the sand-bar in 1836? A. In 1836 it became a good deal lower than before and very narrow.

Q. What did it look like? A. It looked more like a ribbon stretching along there, only it was a little wider than common ribbons in ladies bonnets.

MR. McLEAN.—A little bit wider? A. Yes sir. I could perhaps have taken one and laid it on it. It was a narrow neck between the old mouth and the pier. When there was very little wind the ripple would break across it.

Q. Then it had worn down nearly to the surface? A. Yes sir, except at the pier.

Q. You spoke of the house upon it. Was that house blown over at the time of the gale, or did it remain? A. Well, I never saw it clear over. It stood there afterwards.

Q. It stood upon blocks? A. Yes sir. I should judge it was set upon a piece of block timber just laid upon the sand, as near as I could judge. If there was anything under that I could not see it.

Q. Did you see this house taken down afterwards? A. They were removing it very soon afterwards. I think I saw men at work on it.

Q. Did you see the sand-bar stretching along after the storm? A. Yes sir.

Q. What was its appearance? A. Well, it was very narrow. It grew less and less.

MR. McLEAN.—That was the time it was like a ribbon? A. Yes; it became narrower after that. That is my best recollection.

Q. You have spoken about the effect of the north or south pier in diminishing the sand-bar. Do you attribute that to a change in the current, or cutting off the supply of sand drift? A. I have no doubt if the pier had not been put there, that it would have found its way out, and would have been hove ashore, because I judge of it the same as other streams. I have crossed it when it was very difficult to cross it.

Q. If the pier had not been put there to confine the current between the piers, and the water was left to itself, it would find its way down the shore to form a bank again. A. Yes. I judge of that fact from this being driven away down here, and from its having no vegetation upon it.

MR. McLEAN.—It would find its old mouth. A. It would not usually, as the water receded, follow down and come out where it did before.

Q. Is there a current running down the western shore of the lake? A. Yes sir.

Q. Does that current carry down sand? A. That is the way we have accounted for the sand floating around the edge of the bar so much. and forming these bars.



Q. What is the effect of that upon the shore upon the north side of these piers? A. It has made a large quantity of land there.

Q. What would have become of that sand if the pier had not obstructed the current? A. It would have gone along the lake shore to where the current carried it. That is my opinion.

Q. How did that land make on the north side? A. It has been making gradually, sir.

Q. The same way as it has been carried away on the south side? A. Yes, I say the same—I don't know as it is exactly the same.

Q. It is by a process of years? A. Yes sir.

MR. HOYNE examines.

Q. Do you remember block 7 in the old town, across here at the Forks, where they have talked of excavating for a basin—Isaac Cook's lot—the point where they have lately been excavating? A. If it had been a few years ago I would have remembered it.

Q. Don't you remember that a large proportion of that block was under water—repeatedly? A. Yes, at that time of high water.

Q. Repeatedly under water? A. Well it has been since they have been cutting it down.

Q. But I am speaking of a time anterior to their cutting it out. A. I know they have been changing it.

Q. But I am speaking of an anterior time. A. Well, a share of it, I knew a share of it was repeatedly under water.

PHILO CARPENTER, called by the defendants, being duly sworn, was examined in chief by MR. JOY, as follows:

Q. When did you come to Chicago? A. I came in July, 1832.

Q. And have lived here ever since? A. Yes sir.

Q. Do you recollect noticing when you came into Chicago, or about that time, the appearance of the shore in reference to the grave yard there, sir? A. I have some general recollection in regard to that.

Q. When you came along that river in 1832, did you notice any of these coffins, spoken of, sticking out? A. Yes sir.

Q. How far up towards the harbor, do you think you saw them? A. Well, I should think some of them presented

themselves north of Randolph Street, and some south of Randolph Street.

Q. That was in 1832. A. Yes sir.

Q. Did you notice them frequently afterwards in subsequent years? A. Yes sir, until they disappeared.

Q. Was the water in that year, 1832, and in subsequent years in the habit of breaking clear across that bar, to the shore so as to affect the shore and wash them in that way? A. That is my impression, that it did.

*Cross-examined by* MR. McLEAN.

Q. Do you know how this ground which was on the main shore was washed away, whether by the storms of the lake or water of the river? A. It is my impression that it was washed away by the action of the lake.

Q. Explain how that happened? A. Well, I have seen the water during a severe blow breaking over the sand-bar and washing away the shore.

Q. In 1832? A. I am not quite positive sir, how early I saw that. The bank presented the appearance of having been washed away.

Q. Was not that at the very lowest part of the sand-bar, at the old mouth of the river, down at Madison street? A. Well, sir, the bank presented an appearance north of that of having been washed.

Q. How much would it have had to wash over to have done so? A. I could not say.

Q. Would it not have made a pretty long wash to have come across the sand-bar and the whole of that river to the bank? A. It might have been so. My recollection is rather general.

Q. May you not then be mistaken as to the location of these graves, and may it not have been between Randolph and Madison? A. I am quite certain that some of these graves presented themselves north of Randolph street. The banks presented a general appearance of that kind.

Q. Have you ever noticed this sand-bar diminish in quantity from the effect of storms upon it? A. Yes sir. I think I have.

Q. Has not that been the general way in which it disappeared—from the effect of violent storms? A. I have no doubt, but that is the manner in which the sand-bar has changed its position.

Q. Might not this west bank of Chicago River have been worn away by the freshets of the river as well as the action



of the lake? A. It is possible they might have been affected somewhat by it.

Q. Every spring did you not usually have a freshet in the river? A. I think so. I am not able to say how much it would affect this bank, a good many rods north of its mouth, where it formed almost a right angle.

Q. But a swift current washed down there, carrying ice, at the breaking up of the winter, would naturally tear that away? A. Yes, I suppose so.

Q. Do you recollect the violent storm in 1836, when those shanties were washed away? A. I recollect a building that stood there, and seeing it undermined, probably on one side, and careening over.

Q. Was it not the effect of a violent storm? A. I should judge it was.

Q. Did it not wash away a considerable portion of the bar at the time—submerge it under water? A. The sand-bar would sometimes disappear at one point and appear at another point.

Q. From the effect of violent storms? A. Yes; violent storms.

Q. That was sensible to a person who would examine it and notice it? A. I think so.

MR. JOY.—When you say “sensible,” do you mean that a person standing there for an hour would observe changes in that sand-bar? A. No sir.

MR. McLEAN.—But you would see changes from the effect of that very storm? A. I could in a succession of storms. You would notice the result.

ELI WILLIAMS, called by the defendants, being duly sworn, was examined in chief by MR. JOY, as follows:

Q. How long have you lived in Chicago? A. I arrived in Chicago the 14th of April 1833.

Q. Have you lived here ever since? A. Yes.

Q. Did you see that sand-bar when you came here? A. Yes sir.

MR. McLEAN.—Have you any interest in the I. C. R. R. Co.? No sir.

Q. What was the appearance of it [the sand-bar] when you first came here, how high at the upper end, and along down? A. Well sir, I could not say how high it was at the upper end, I know it gradually went off and disappeared under water at the south.

MR. LARNED.—Were you speaking of '33? A. Yes sir, 1833.

Q. In high storms such as we have here in the fall, almost always, would water break across that sand-bar, even at that day? A. I think it would very nearly. It might not close up to the pier.

Q. Have you ever observed the effect of storms coming from the north-east on the south end of this lake raising the general level of the lake? A. Yes sir.

Q. Does it do so very considerably? A. I should think it did.

Q. How much would a heavy storm raise the waters of this end? A. I could not tell so much on the lake as on the river. On the river it would vary two or three feet.

Q. What would be the effect of a rise of that kind on this bar, would it bury it up or submerge it? A. I should think it did.

Q. Then after the storm the waters would come back? A. Yes sir.

Q. State whether the seas would wash across to the main shore? A. Yes sir, it would wash over the sand-bar and wash away the bank.

Q. Do you recollect the graves that have been spoken of? A. Yes sir.

Q. How far north towards the harbor have you observed these graves sir? A. It must have been between Washington and Randolph. It may have been a little north of Randolph.

Q. But certainly as high as between Randolph and Washington? A. Yes sir.

Q. Was that inside of the bar? A. Yes sir.

Q. Do you know in what year the city fortified the part there? A. No sir, I don't recollect the year they put in the stone. They put in some stone in the first place, and they then built some triangles and filled them up with stone.

Q. That was after the sand-bar had finally disappeared? A. Yes sir, after that they put in stone to protect the shore below.

Q. When was this they finally fortified it all along the shore by filling in there? A. I don't recollect, it was the year Mr. Gurnee was Mayor. Mr. Stuart did the work on it, Mr. Gurnee was the principal mover in the protection there.

Q. He was the owner of property along there? A. Yes.



Q. Was there danger of that street being carried away?  
A. Yes sir, very much. I know they turned out one night with timber and stone.

Q. To fight Lake Michigan? A. Yes. Mr. Gurnee thought his house would go away, or the street clear to his house.

Q. State what the result was with this sand-bar—how it moved away and disappeared? A. My impression is after they built the pier across the river, when it used to put out between the bank and this sand-bar, the water used to come around and form an eddy. It was much nearer the pier than the eddy is now, and as they continued the pier out the eddy kept forming further south.

Q. When did the sand-bar go away? A. Well, sir, I think it was in the fall of 1836, I built an ice house on the lake shore, which was north of Monroe street. I think I filled that ice-house twice and the water took it away. The sand-bar at that time, was a little north of where I built.

MR. HOYNE.—That is the next street south of Madison?  
A. Yes sir. I tried to get the privilege of building opposite the corner of fractional section ten, but the garrison would not allow me. I then wanted to build on the corner of section fifteen, but Mr. Wright wanted to set out trees there, and I went further south and built an ice-house.

Q. Did that sand-bar disappear suddenly, or by a gradual process through a series of years? A. It went away gradually. I watched it pretty close, for I was afraid for my ice-house.

Q. How long a time was it in washing away, from the time the water began to wear it away? A. It must have been three or four years sir.

Q. When did it finally disappear up to the north end?  
A. I do not know when it disappeared clear up to the pier.

Q. When was Mr. Gurnee Mayor? A. I do not recollect the year now.

Q. Was it not '50 and '51, or '51 and '52? A. I do not recollect.

Q. Don't you recollect that Mr. Gurnee was Mayor when the I. C. R. R. was negotiating to enter the city? A. Yes sir.

Q. Made the contract with them? A. Yes sir.

Q. That must have been after '51, when their charter was passed? A. I don't recollect the year.

Q. Was that the time they turned out to defend the lake shore? A. Yes sir.

*Cross-examined by MR. McLEAN.*

Q. Where is that point where they turned out to defend the lake shore? A. It is at the foot, or head, of Monroe street.

Q. Near where you built your ice-house? A. Yes sir.

Q. Did they succeed in protecting the property? A. They had protected the bank.

Q. Built it out? A. No sir. Only filled it in with some stone.

Q. How long did that ice-house remain? A. I think but two years. I think I built it in the fall of 1836, and filled it twice before it washed so much that I could not fill it again; but some part of it remained.

Q. Was it not washed away by the violent storms? A. It was washed away by the action of the lake.

Q. Was it not the action of the lake in storm after storm that washed it away? A. Yes sir.

Q. Did it not wash it away in large pieces in violent storms? A. Yes sir; it would wash the bank higher up, and then, when the water subsided, with a very little ripple it would take off the ground. When there was not so much storm it would take it out, and when it came a large storm it would take it out in larger amounts.

Q. In large masses? A. Yes sir.

Q. Didn't it take it off visibly when it took your ice-house? A. No sir; I could not see it go off.

Q. After a violent storm, comparing the appearance before and after the storm, was it visibly affected or diminished? A. When we had a storm, it would generally flatten out the south end of the bar. It would seem to carry it to the shore, and perhaps it would not be visible; but after the storm had subsided, the water would continually work and carry it back again.

Q. The effect then was to wash it until it disappeared there? A. It either covered it with water or flattened it out.

Q. That was the visible effect, was it not? A. It was to be seen after the storm was over.

Q. It was sensible to any one who knew the sand-bar, was it not? A. Yes sir.

MR. LARNED examines. After violent storms, walking up that lake shore, have you not for a series of years, al-



ways been able to see that the storm has wrought upon the lake shore—to see the ruin it has accomplished? Is it not a common thing? A. I used to generally go up there after a storm, to see if my ice-house was safe.

Q. Could you not see that a portion had been swept away by the violent storm of the night before? A. Frequently, sir.

Q. Has not the whole of that shore, below where you built your ice-house, been affected by storms—acres of it washed away? A. It washed before they built the protection there.

MR. HOYNE examines. Do you remember the Park and trees opposite Mr. Wright's place? A. Yes sir.

Q. How far did it extend out beyond where the street now is? A. I should think there must have been three hundred feet there, perhaps in front of what is now the street.

Q. Where the water is now? A. Yes sir.

Q. Was not that ground covered at one time with trees, and a grove, opposite Mr. Wright's place at the foot of Madison? A. He set out a number of trees.

Q. That has all been washed away, has it not, by the action of these storms? A. Very near, perhaps not quite all.

MR. MCLEAN.—Storms affected this sensibly so that you could see the effect after every storm? A. Not every storm.

Q. Every considerable storm? A. Yes.

MR. HOYNE.—You have seen the masses of earth brought down by the action of the water? A. Yes sir. As I said before, the action of the water would cut out under the bank.

MR. MCLEAN.—How high is that outside breakwater of the I. C. R. R.? A. I don't know.

Q. How high do you suppose it is above the water? A. I cannot say sir.

Q. How far is it from the R. R. track? A. I could not tell the number of feet.

Q. Do these violent storms break over that now? A. They do further down.

Q. Did we not have a violent storm here a month ago, that broke through that break-water down there? A. I do not know. I did not see it.

*Direct Examination resumed by MR. JOY.*

Q. That was two miles further down, below the round house. It strikes square against the shore there? A. Yes sir.

Q. Is there a pretty considerable angle in the Railroad, after you get down a mile or a mile and a half, running off eastward? A. Yes sir, below the Round House.

Q. The waves that come in quartering above that would strike there square against it, with a wind from the north-east? A. Yes sir. I should think it would.

Q. They would strike the shore in a quartering way above? A. Yes sir.

Q. Was not that shore a bluff when the waves were coming against it, up here opposite the Park? A. Yes sir.

Q. Do not waves striking against a bluff line, produce a much greater effect than rolling over a sand bar? A. I should think it would.

Q. That is the reason you could produce the effect in the one case when in the other you could not at all? A. Yes sir.

MR. McLEAN.—Do you say you could not perceive the effect of a storm at all on a sand-bar? A. No sir, I said we had storms when it would flatten out the end of the sand-bar, and apparently carry it nearer the shore when it was very high water, and keep constantly at work taking it away.

MR. JOY.—Could a man notice the effect in half an hour? A. No sir, not upon the sand-bar.

Q. You might against the bluff? A. Yes sir, perhaps so.

MR. LARNED.—Do the waves strike this place Mr. Hoyne spoke of, at any different angle from what they would have struck the sand-bar? Is it not the same angle until you come to the round house? A. I should think it would strike different from this angle in the Railroad below the Round House.

Q. The action of the water before was to strike heavier between Madison and Monroe than almost anywhere else? A. About the foot of Monroe.

Q. There is no difference in the angle there, is there? A. I do not know that there was.

HIRAM HUGUNIN, called by the defendants, being duly sworn, was examined in chief by MR. JOY, and testified as follows:

Q. Captain, were you here in Chicago when that pier



was built? A. I came here after it had commenced to be built. I came here in June 1834 with my family. I was here before

Q. Did you have a contract connected with that pier?

A. Yes sir.

Q. What was it? A. To furnish the stone to build it.

Q. How long were you here in Chicago at that time? A. I came here in August, 1833, and was here about two weeks. I came again about the first of October, and stayed here until the last of November—about two months.

Q. When were you here again? A. I came again in June, 1834.

Q. How long were you here then? A. I was here then until 1837. Then I went on the canal for a short period, and then returned here.

Q. Have you been accustomed to navigating the lakes, Captain? A. Yes sir.

Q. For how long were you so engaged? A. About eight years.

Q. Are you familiar with the action of the waves with the sands on this coast? A. I am somewhat familiar with it.

Q. Do you live on the coast? A. Yes sir.

Q. Where? A. At Waukegan, 35 miles from Chicago.

Q. When were you first at Chicago? A. In 1821.

Q. What brought you? A. I was mate on a schooner called "The Superior," and came here to fetch supplies to the garrison. That was about the middle of July.

Q. How can you fix the date? A. I was at Green Bay on the Fourth of July, and my captain gave a *soiree* on the schooner.

Q. A sort of Independence day? A. Yes sir. I there joined the schooner and came from there here.

Q. Had you a run of eight or ten days? A. I think we were about three days there before starting, and about five or six days coming here.

Q. What did you have aboard of your vessel? A. Flour, pork, clothing, and so on.

Q. What was the name of the schooner? A. "The Superior," Captain Keith.

Q. Did you leave the supplies at the garrison? A. Yes.

Q. Did you have any passengers on board? A. Yes sir, Dr. Hall and Lieutenant Morris.

Q. How long were you here? A. I should think five days, sir.

Q. State how you unloaded your schooner. A. We arrived here upon Sunday evening and sent our passengers on shore, and Monday morning we commenced unloading by a batteau—what was called a “Canadian batteau.” We discharged our cargo and took in part of a cargo.

Q. Where did your vessel lie? A. On Sunday evening, when we came, we lay right opposite the garrison. On Monday there came a gale, while the crew were all on shore, except the captain and myself and a supernumerary, who was sick; and we got the vessel out, and we were out three days by that gale before we could get back. We then stood in again and got into the harbor.

Q. Where did you make your entrance? A. About where the south pier now is, according to my recollection.

Q. How many days were you unloading? A. I should think not over two days unloading—perhaps three.

Q. What did you take on board? A. Furs from the garrison.

Q. Was the river running out there at that time? A. Yes sir.

Q. Was that what you took to be the mouth of the river? A. Yes sir. But when we came here again, for I came here again in 1833—

Q. Did you find the mouth of the river then, at the same place? A. No sir; the difference was, I think, something over a quarter of a mile, perhaps a third of a mile below where I found it in 1821.

Q. How deep was the mouth of the river, where you entered it with your batteau? A. I should think that from the fact, that we grounded with our yawl, and had to push her with oars through the sand, that there was about a foot and a half—perhaps twenty inches.

Q. How wide was it? A. According to my best recollection, from three to four rods.

Q. That was in 1821? A. Yes sir.

Q. You were not here between 1821 and 1833? A. No sir.

Q. Did you observe the action of the water, after this pier was built out—the south pier stretched out in 1833? A. Yes, to some extent, that is, I was a contractor on the pier in 1834, and we commenced the other pier in 1835; and



I then discovered that the bar had diminished from the running out of the pier. The bar had diminished both in height and width. That was in the spring of 1835.

Q. Had you been absent? A. No sir, but I had been at work on the north pier, and hadn't paid attention to matters on the south side.

Q. How long was that? A. During one winter—from the fall of one year to the spring of another.

Q. How was it after that? A. Well sir, I ceased to be a contractor in 1835. I didn't give it much attention. In 1836, I had nothing to do with the public works.

Q. Did you ever observe the waves and seas breaking upon it? A. Yes sir.

Q. State the mode and manner in which that sand-bar disappeared—whether suddenly or slowly? A. Well sir, it manifestly went slowly, by regular process of gradual decrease.

Q. For how long a time was it wearing away? A. Well sir, I had occasion to be there, and had good reason to know, that in the gale of wind, on the 4th of October, 1836, that the sand-bar was then entirely disappeared under water, except a little portion of it near the pier.

Q. That was a very severe gale, was it? A. Yes sir.

Q. You mean it was under water during the gale? A. Yes sir. I was there at the time, and had two vessels surrendered to me, as the agent of one insurance company, and one of another, and they were all ashore there.

MR. LARNED.—Ashore on the bar? A. No sir, one went ashore just immediately by the pier, where the sand-bar had been, about the foot of Washington Street, and one about a mile below.

Q. How was it after the storm had passed over and the water subsided? A. I don't remember to have seen anything appear after that gale, except near the pier, where it was protected by the pier.

Q. Do you recollect the appearance of it before the gale? A. I do not, except, generally, that it was in process of decrease.

Q. How high was it above the water? A. I should think at no time I ever saw it, was any part of it, except where it had been excavated, and the sand was piled up—I should think no part of it was at any time above two and a half feet above the level of the lake, at the highest point.

Q. How high was it during 1836 ? A. It disappeared during 1836. It had diminished to a mere nothing, at the extreme south point. It was perhaps a foot, up below the pier, where the wind could not blow it away. It was lower as you went south.

Q. Just above the surface of the water ? A. Yes sir, I think in the fore part of 1836, it was just above the surface of the water ; but I don't remember any of it after that gale. I think if any of it had been above the water, I should have noticed it.

Q. State what was the action of the wind and waves breaking upon the sand-bar ? A. The effect of the waves upon the sand-bar, if the wind is to the east, where the beach is as here, running north and south, or if the wind is north of east, the effect is to remove the sand further south. If the wind is to the south-east, it removes the sand further north.

Q. What effect would the working of the wind upon that bar, rolling over it, have in removing or adding to the sand-bar ? Would it be perceptible to the eye ? A. It would depend entirely upon what the current was during that wind. If the current was from the north, the current washing up this way, and not going back to the same place, would retreat further south and carry off the sand that was held by the water, and hence the sand, by the action of the wave would be removed further south. If it was coming from the south of east, it would carry the sand north ; hence if the sea came directly from the east, it would wash up and back again, and not make any difference in depositing the sand there.

Q. How high did the water rise during that gale ? A. It must have risen at least two feet, perhaps more—two and a half.

Q. How long did it continue very violent ? A. For two days it continued—for forty eight hours.

*Cross-Examined by MR. MCLEAN.*

Q. Were you one of the early pioneers, Captain ? A. I was here in 1821.

Q. You have spoken of the mouth of the river, as it appeared when you landed from the schooner. Was not that an artificial one, made by the garrison, to land your supplies ? A. I found it here when I came.

Q. Was there not, at the same time, a mouth of the river



lower down, somewhere about Madison street? A. No sir, not that I know of. I saw nothing of the kind.

Q. You did not think there was any other mouth, but at that point at that time? A. No sir, there was no other.

Q. When did you come again? A. I next came here in 1833.

Q. Then, where was the mouth? A. Then it was below here—perhaps below where I found it in 1821, a quarter or a third of a mile. I cannot locate it. I should think perhaps two streets to the south of this—I should think a little south of the house then known as the Handy house.

Q. Were you employed afterwards in 1834? Had a contract on the north pier? A. Yes sir.

Q. How long were you at work at that? A. Two years. Not entirely two years. I commenced about the first of July 1834, and worked the balance of that year and the succeeding year.

Q. Were you in the habit of seeing this sand-bar? A. Yes sir. I was there, I should think at the unloading of every scow that was unloading the stone.

Q. When you came here in 1821, and saw what appeared to be the mouth of the river, where the piers are now, was there any land south of that, where the sand-bar was afterwards? A. Yes sir.

Q. What time was that? A. 1821.

Q. The river had banks there on each side of it then? A. Yes sir, right where the piers are now; and instead of running in a bend, it ran across. I should think the river ran out about where the south pier is now. There was a slight current in the river, such as there would be going in at the south pier now.

Q. But this tongue of land was there then? A. Yes, but there was a river between it and the main shore.

Q. It was a tongue, however? A. It was a kind of beach, on both sides alike.

Q. Were you at work on the north pier, and when you came back to the south pier, you observed it had diminished? A. Yes sir.

Q. How long was that? A. I was to work in 1834 upon the north pier, and came away in 1835; in June, I should think. It was all the winter.

Q. In how many months was it that this sensible diminu-

tion took place? A. I couldn't state how many months, from the fact that I paid little attention to the sand-bar after I was at work on the north pier; but when I came back to the south pier, it was under my eye.

Q. In 1836 it all disappeared except a small portion up by the pier? A. Such is my recollection.

Q. Do you remember the houses there? A. Yes.

Q. You remember their washing away? A. I know they were missing.

Q. In that storm? A. I think it was, I have not a very distinct recollection.

Q. It was in 1836? A. Yes, but I am not positive about their being washed away.

Q. You don't remember the sand-bar after that? A. I don't remember of having seen any portion of the sand-bar after that.

*Direct Examination resumed by MR. JOY.*

Q. Did the entrance by which you entered this river have all the natural appearance of the natural outlet? A. I so regarded it, sir.

Q. How long were you here? A. I was here certainly five days—here and off here—unloaded the supplies and took supplies in.

Q. How many times did your batteau go through? A. I suppose ten times. It was a batteau, I think, furnished by the garrison.

Q. You say this sand-bar disappeared from '33 to '36, and that after '36 it was not visible? A. Yes sir, my recollection is it was not, but I don't know that it was previous to the storm, I know that it was generally depreciating.

Q. You are acquainted with the action of the winds and waves at Waukegan, on the sand-bar there? A. Yes sir.

Q. From your knowledge of the action of the waves and winds there, as well as here, state whether it went away by a slow and gradual process, or by being suddenly carried away? A. From my knowledge of the action of the winds and water upon sand, causing it to be deposited or removed, it gradually went away; each little wind would carry it away; and the current would, but more rapidly with the wind. There is a wind that will take up sand like snow, and deposit it elsewhere, any wind will do it. But when a wind blows of the magnitude of a gale, as I call them,—when a wind of that kind arose, so that it would heave the



sand in ridges, it removes it very rapidly then ; but by the action of the water it removes it slower, and removes it in proportion to the violence of the waves. A slight wind would remove it slowly, a heavy wind faster. It removed with the wind and water also, drifting the sand. A heavy wind creates a heavy wave and that washes it.

Q. Was there in the history of that bar, from the time you first knew it, a time when you could notice the effect of a wave or a dozen waves upon it? A. No sir.

Q. Or in the course of half an hour? A. No sir.

Q. How would you ascertain whether it diminished or not? A. Perhaps marks, if set up, would show at each succeeding gale of wind; and without marks, I doubt whether a gale of three days would show any material depreciation.

MR. McLEAN.—[Presenting map of 1818.] Look at that map and say where the mouth was? A. I think at the time I came here, the river ran out about that point, right east of the garrison [indicating], with a slight curve to the north, I should locate it about there.

MR. JOY.—Just about where the pier now is. A. Yes sir. [Marks the place with a pencil.]

ERASTUS BOWEN called by the defendants, being duly sworn, was examined in chief by MR. JOY, and testified as follows :

Q. Do you live in Chicago? A. Yes sir.

Q. Do you recollect this sand-bar. A. Yes sir.

Q. How long have you lived here? A. Since June 1833

Q. Where did you live in the city of Chicago? A. Well, I boarded here some year or more after I came here; but the main time I have lived here was down on the lake shore. After the reserve was sold, I went down there to live—down at the east end.

Q. What time did you go on the lake shore? A. I went there in the fall of 1839, I think after the reserve was sold.

Q. Where you come right off the lake? A. Yes.

Q. What was the condition of the lake in reference to that sand-bar, when you went there? A. There was some sand-bar left there—some stubb of it, that butted up against the south pier. The sand-bar ran off down a piece, I should think pretty near down to Water street, some-

times it was shorter and sometimes longer, that was the time I went there; I went there in the fall or latter part of the summer of 1839.

Q. It depended on the stage of the water? A. Yes sir, sometimes it extended down to Water street and sometimes shorter.

Q. Do you recollect when it extended down in the vicinity of Madison street? A. Yes sir.

Q. You saw the action of the water during the four or five years before 1838? A. Yes sir.

Q. State how it disappeared, whether by sudden, or a slow and gradual process? A. Well, it was gradual. After the south pier was through, and the water confined to its present bed, it commenced to wear away at the south end, and wore away gradually along from that time until about, well, about the time I went there in 1839. From the spring of 1834 until 1839 there was a gradual action.

Q. Gradually wearing off and progressing until it reached up to the north end? A. Yes sir.

*Cross-examined by MR. McLEAN.*

Q. Was not this bar worn away by the action of the gales and storms of wind? A. Yes sir, I suppose so.

Q. After a gale of wind could you not see a diminution of the sand-bar from its position before? A. Sometimes it would shorten, then it would come a south wind, and it would lengthen; but its general tendency was to shorten.

Q. Didn't it disappear storm by storm? A. Yes it disappeared—went off gradually.

Q. Storm by storm? A. Yes sir.

Q. When you say gradually, do you not mean it took a year or two, but in the mean time portions may have gone off suddenly? A. I think about 1834—in the spring of 1834, it was growing shorter up to the time it was cut short in 1839.

Q. Was it not shortened by the successive storms each year? A. Oh yes, this was taken away principally by the action of the water.

Q. In violent storms? A. Yes.

Q. Would the simple, calm lake take away that sand-bar? A. No sir.

Q. But it was taken away by violent storms as they occurred from time to time? A. Yes sir.

*Direct Examination resumed.*



Q. They have asked you if the water, when perfectly still, would wear it away. How was it when the wind blew a gentle gale? A. It depends on which way the wind was. When the wind was from the north or northeast, it would wear away. Then probably the wind would shift around south or southeast, and it would make these little formations; but probably it would not lengthen out so much as the northeast wind took it away. It kept gradually working shorter.

Q. Did you ever notice it, when, in the course of a day, you could see it had diminished? A. No sir, it would not be visible in so short a time; but take it in a long period of time, and you could see the diminution.

*Second cross-examination by MR. McLEAN.*

Q. Do you remember that violent storm in 1836? A. Yes sir.

Q. Could you not see that in that storm it had diminished in size? A. Yes; so much so that these houses were thrown down.

Q. How long did that storm last? A. Well, some 24 or 36 hours.

Q. Then you could in 24 or 36 hours see a sensible diminution in quantity? A. Oh yes; looking at it probably to-night and may be to-morrow night, the water would subside and I could see it was lessened some; and then probably the wind would haul around from the south or southeast, and the sand would work back some and add a little.

Q. But the northeast gales were sensible in their effect, and you could see it diminish in quantity? A. No sir; I could not look at it and see it diminish.

Q. But, say that to-day a northeast storm came and raged for 24 hours, could you go to-morrow and see it had diminished? A. Yes sir, it would draw the sand down, and then the seas were so heavy they would draw it back again.

Q. You mean you could not see it, because you could not stand there in a storm and see it? A. Standing on shore, you could see the water move.

MR. JOY.—Q. Did you see the houses after they were pushed over? A. Yes sir.

Q. Was the water under the underpinning? A. Yes sir.

Q. How long did that remain? A. They were taken away before a great while.

MR. McLEAN.—Q. They were tipped over? A. No sir; they were inclined. I do not mean they were tipped over on the side; the sand was gone from under the foundation.

JAMES WATSON WEBB, called by the defendants, being duly sworn, was examined by Mr. JOY, and testified as follows:

Q. Were you acquainted with Chicago at an early day?  
A. Yes sir, at a very early day.

Q. Not quite so large a city then as now? A. Not quite so.

Q. How did you come here, General? A. I came here in a schooner.

Q. How long were you here? A. I was here in July. I have had a difficulty in my mind whether it was June or July. But, from the testimony I have heard, I think it was from July, 1821, until September, 1822—the latter part of September. Captain Hugunin said he had some passengers: Captain Morris and Dr. Hall. I know I arrived just after them, for they arrived just before me, which makes me think it was July.

Q. State what was the condition of that sand-bar? A. I will state to the jury that I have only visited Chicago once since 1822, and that was in 1849; this is my second visit, and consequently I know nothing about the streets, except from the localities then.

Q. You have heard Mr. Hugunin state where the river ran out into the lake at that time? A. Yes sir; but I could not understand him. He mentioned no points I understood.

Q. [Presenting a map]. There is his point. A. Yes sir, directly opposite to the Fort was what we called our wash-house, and easterly of the wash-house was the then mouth of the river. The river also—I might as well go on instead of its being brought out by questions.

MR. JOY,—Yes sir, I would rather you would do so. A. The width of that mouth was, I suppose, 50 or 60 feet, but it was not deep—not to exceed 18 inches. There was also another opening further down, and a very little water passing out, and, indeed, none at times. There was a theory, at that time, in regard to the ebb and flow of tides, and my attention was called to this ebbing from the general conviction that there was an ebb and flow. But from very close observation, I became satisfied there was nothing of the kind. When there was a north wind the water rose and passed this mouth that was closed. I have known drift to pass that and come up into the river, and the same case here [pointing to a spot on the map]. The distance to that



lower opening was less than the distance from this Branch. I was in the habit of fishing at night, and it made me familiar with this bay—for it was a bay only affected by the rise and fall of the water. We would spear fish from this place clear up to this fork. We knew nothing about the distance, but we called it half a mile down from that lower oak. The winter of 1821 was excessively severe, and the ice formed on the shore some 15 or 18 feet in height, by a constant action of the water, and when it so formed the mouth of the river became closed. This mouth closed, and the water passed out there [indicating the points]. In the spring of 1822, the heaviest freshet took place known to anybody, then or since, I believe, and when it came down it swept this channel so deep that our supplies by the next schooner were brought right in here [at the bend]. When this channel opened, in 1822, that other channel closed entirely. In the winter this channel had been closed, and the water had poured out at that one. But the flood in the spring opened it directly opposite to the fort east of our wash-house.

MR. McLEAN examines. Q. Does that map represent the tongue of land there at the time? A. It was not quite so long, I should judge. It is impossible for me to state in regard to form, and in answer to a gentleman asking me about the level this morning—I said the crown, or backbone of this tongue of land, or rather sand—for there was no land about it—varied from two to five feet. The highest part varied being near the upper mouth—it was a sand-bar affected daily by the action of the wind—whether the action of the lake affected it or not, I do not know. I don't know whether, it was increasing or decreasing. The sand was so loose that the action of the wind constantly affected it, as also the sand up here, [pointing to the lake shore north of the river,] where there was wood and brush, and sand hills, apparently not affected by the water, but by the wind.

Q. How high did the sand blow along here? A. No part of it was higher than five feet.

Q. How long did you remain here? A. Until September 1822.

Q. It is in testimony here, that the officers had some fox chases on that bar. Do you know any thing about that? A. We had fox chases, every other morning during the season. Dr. Hall and myself kept a pack of hounds, and

we never went out. We did not hunt a fox on the east side of the river, and never caught one, but they always escaped. We went out next morning after deer, and we never failed to get them. I have rode until 5 o'clock in the afternoon, before we got the deer into the lake. But the foxes always got away above us. I don't recollect any fox chases there of that kind. We used to have wolves, that we caught in traps, and after they got well, we would take them out and set the dogs at them. I remember, at one time, we had such a wolf chase, and I had a fine heavy dog, who followed him over into the lake. To get him out, it was necessary for some one to go in the water and I went in. A rope was put around me, and I went in and brought him out.

MR. JOY.—You spoke of sand-hills and bushes : were they above this, north of the pier ? A. Yes sir, entirely north of it. A line drawn from the wash-house would leave all verdure and vegetation of every description 300 yards to the north (west) of it. There was no kind of vegetation on the sand-bar. There was nothing over five feet high.

Q. Were there any hills ? A. I imagine there was nothing over five feet high ; perhaps not so much ; it may have been more. It is such a distance of time, I cannot recall it.

Q. Not any high hills—ten or fifteen feet high ? A. No sir ; the hills were on the other side. I noticed them. They were little knolls of sand covered with bushes, and between the bushes, where the bushes had not taken root, the wind had blown the sand out, so that each stood by itself, as it were.

Q. You were here until September, 1822 : was that river open all that time, at that place ? A. Yes sir. By the action of the lake and passage of the water, blown to and fro, it was always floating in and out. When it broke loose in the Spring, there was a very great fall of water. The water was so high in the Aux Plaines and the Chicago that I think it went down with a great rush through there ; and in discharging the cargo then, it was necessary to tow them through, the river was so much higher.

Q. Was the lake high or low at that time ? A. It had been falling for some time, and continued to fall, as I understood, for three years ; because I left here in September, 1822, and went from here along the shore of the lake to Milwaukee, and at that time there was a very extensive flat, from which subsequently, I understood, the water subsided. It was all water when I passed, and subsequently became a



flat. I remember going to Green Bay, at the head of the lake, and passing Milwaukee I saw that the water was falling; it was low at that time and continued to fall; of course, I only know that by hearsay. The water of the lake was supposed to have fallen a foot. Subsequently, in watching the course of events in Chicago, I learned the water had fallen here, and in all the upper lakes, some two or three feet; and I learned that this great flat had appeared at Milwaukee. It had been falling for two or three years, and I understood it continued to fall for several years, until it reached a fall of three feet.

MR. JOY.—Did you ever, at that time, know of that channel being shovelled out by the soldiers? A. No sir.

Q. If it had been done, you would have been aware it? A. I don't know; most probably; it would have been one of those things I should have heard. I don't know that it ever was done. I don't know of its being done.

GRANT GOODRICH, called by the defendants, being duly sworn, was examined in chief by Mr. JOY, and testified as follows:

Q. Judge, how long have you lived in Chicago? A. Since May 14th, 1834.

Q. Where did you use to board when you first came here? A. When I first came, I boarded at the Mansion House, about opposite the Tremont now; subsequently, at the City Hotel, on the corner of Wells and Lake; and afterwards at the Tremont House.

Q. Were you familiar with this thing they call the sand-bar here? A. Somewhat. I did not use to have much to do then, and we used to go down to the lake to play. It was not a time when there was abundant law business.

Q. And you had the required leisure? A. Yes sir.

Q. State your recollection about the history of that sand-bar, after the pier was put through it. A. My recollection is, the sand-bar ran down below, perhaps to where Maj. Handy's house was along in the summer and fall of 1834. At the upper end the pier was commenced and the action of the water had begun to wear it and move it gradually up, and widen it out at the lower end. It was evident that a pretty considerable portion of the supply of the sand previous, had been been blown off by the action of the wind as well as the waves. The light sand was blown off so that it left stones on the bar until it came down to

where it was hard, and it settled in height considerably. It continued thus to narrow above and widen below until the next year, 1835, when it had widened out very largely below, and kept working above—working south. Between that time and the fall of 1836, it kept gradually enlarging in that way. In September, or it might have been the first of October, there was a very severe storm, I remember it because I was boarding then at the Tremont house, when I looked right out on the lake, and I remember seeing vessels on the lake. There was nothing then to interrupt the view. That storm took away a considerable portion of the sand. It took away a large portion, and swept away a large body that had collected below, to a considerable extent, but still there was considerable remaining after that above the water, between the pier and Madison Street. The old bar, still remained there I should think, but below that, between the mass that was swept away and the old bar, when the water rose sometimes, it would be all over, and then it would sink, and the land would appear again, and in fact the extent of the bar depended a good deal on the wind and the water, whether it was high or low.

Q. It had become quite low by 1836? A. Yes sir, the upper part had. It had been reduced in height considerably.

Q. You spoke of this storm in 1836. You say a portion of the old sand-bar remained? A. Yes sir, there was a portion of it.

Q. This portion you speak of widening out, was it not called Rockaway (?)? A. There was an Addition laid out there by Mr. Walker, and perhaps by one other person. I remember of Walker's Addition particularly.

Q. That you think was below? A. I cannot tell its location in regard to distance from the pier, but there was one down there laid out. The bar grew longer and finally disappeared.

Q. Did it gradually disappear? A. Yes sir.

MR. McLEAN.—Which bar? A. The lower one disappeared before the one above near the piers. That kept disappearing there until—my recollection is, about '42 or '3. It may have been later, but not earlier. It had so far gone away that it then began to eat into the main bank, and then it became necessary to put piers there to protect the city.

Q. Did the citizens combine together to fight Lake Mich-



igan? A. Yes sir. When the wind was from the south it would make, or there would be an addition to it from the south east. When the wind was in another direction it would gradually wear away, more especially with a north east wind.

Q Take the whole process, was it a gradual, slow disappearance? A. Yes sir, it was, except this time—1836. I could not say distinctly, but that of the main bar there may have been considerable went away then; but that blow was when my attention was called to it particularly, because of the houses there. Somebody said Walker's float had *floated* off, although there was a considerable portion of it there after the storm.

*Cross-examined by MR. McLEAN.*

Q. Judge, Mr. Joy has used the word gradually, and you have assented to it. I want to know exactly what you mean by "gradual disappearance." A. I mean that from time to time it went away, as the action of the waves operated upon it, sometimes more, sometimes less, according to the course of the wind and its violence. Sometimes it would make a little and then go away.

Q. In violent north east storms would it not wash the bar away? A. Yes sir, it does to-day, all along this shore, and it has washed some places sixty rods.

Q. After a violent north east gale could you not see a sensible diminution? A. I could not say that I ever noticed any except at this time.

Q. You did in 1836. A. Yes sir.

Q. A large portion went away then? A. Yes sir.

Q. A good deal of it? A. Yes sir, a good deal of it.

Q. Might there not have been this disappearance in storms and you not notice anything about it? A. Yes sir.

Q. So that your idea of gradual disappearance is, it was caused by the wind and waves, and you don't know whether sudden or violent; only it took a number of years to wash it away? A. It took a number of years to wash it away, and my opinion is it was in northeast storms.

Q. Then it went away sensibly and suddenly? A. I could not say sensibly.

Q. But suddenly during these times? A. Yes sir, but not "sensibly."

Q. Don't think any one ever could see it. A. I am satisfied if a storm blew for three days—and they generally blow

for three days—by the naked eye you could not see that anything had blown away, and yet there had.

Q. You could see it afterwards? A. No sir, when the storm was blowing it would appear there was a great deal blown away, because the water was higher, but when the water had subsided, you could not see that any was gone.

Q. Do you suppose that it blows away when the lake is calm? A. No sir, it makes it.

Q. Then it went away in storms, according to your idea? A. Yes sir.

MR. JOY.—The part you speak of as disappearing during that storm was down at or below Madison street? A. Yes sir, that is my recollection. I could not say it did not disappear above, but that is where it was perceptible.

MR. JOY.—Do you not suppose that the erection of these piers caused the disappearance of the sand-bar? A. I used to think so, but I am not certain of it now. From the action of the water here all along the lake I have great doubts of it. I have seen piers put up here for the protection of the lake shore, where the sand has made more.

MR. JOY.—Is not the whole length of this coast wearing away? A. Yes sir, at Gross Point it has wore away some sixty rods at least. I don't know the cause but it wears away.

Q. But when there is a full, fair drift of the sand, it will remain? A. Yes sir, it is very likely to when there is a full drift.

SILAS B. COBB, called by the defendants, being duly sworn, was examined in chief by MR. JOY as follows:

Q. Where do you live? A. On Michigan Avenue, near the lake shore.

Q. How long have you lived there? A. Three years where I live now; on the lake shore fifteen years.

Q. How early did you come to the city? A. In the spring of 1833.

Q. The piers were not through? A. No sir, they were put through afterwards. They commenced that season I think.

Q. Did you notice that sand-bar a good deal during the subsequent years? A. Yes sir.

Q. What is your idea about the height of it when you came here? A. Well sir, two feet, dwindling down to nothing at the south end.



Q. That is your judgment? A. Yes sir.

Q. Did you observe the process by which that sand-bar passed off after the piers were constructed? A. Yes sir.

Q. Whether it was a sudden, or a slow, gradual process?

A. It was several years before it all disappeared.

Q. Did the waves use to beat across it during the stormy season of the year? A. Yes sir.

Q. How many years was it in passing away? A. I should think there was some of it remaining by the pier, protected by the pier, until 1840—perhaps later—very little of it, however.

Q. When did it begin to disappear first? A. At the southern portion of it. It seemed, though, to change. It seemed to increase in one portion sometimes. The water would break a passage through it and leave it in two or three separate little islands, or divisions, and that would become filled again.

Q. So that it was a continual working of waters, until it finally disappeared? A. Yes sir.

Q. Did it disappear at the lower end and thence up toward the upper end gradually? A. Yes sir, when it went away permanently it did.

Q. That was through a period of three or four or five years, up to 1840? A. Yes sir.

Q. Had it disappeared in 1840 clear up to the pier? A. I have no recollection of seeing any after that time.

*Cross-examined by MR. McLEAN.*

Q. Had you any particular reason for noticing that bar?

A. Yes sir. I lived then right opposite and I used to take a stroll down there occasionally.

Q. On the sand bar? A. Yes, and along the lake, when I saw a vessel coming in.

Q. How wide was the bar when you used to go and walk upon it? A. Well, it varied. Sometimes a hundred feet or more, and at that very place it would seem at another time to be narrower.

Q. How far did it extend? A. As low as Adams street. No, I don't mean Adams either, but Monroe. I know the general impression is Madison, but I think it was lower. That is my impression.

Q. Have you ever noticed that sand-bar before and after a violent storm? A. Yes sir.

Q. Did not a violent storm affect it sensibly? A. Well,

I used to think it would have taken it away altogether. I have witnessed a storm when it was so completely covered, that it was taken away, but when it subsided and the waters were lower, and the wind changed and blew from the land, it would be apparently larger than ever. It would look larger; when the wind blows from the lake it makes it lower.

Q. After a violent north-east gale, what effect could you perceive? A. Sometimes it would appear that some portions of it were smaller. It would go at some portions, and then when a storm came from the south, it would carry it back again, and throw it out over into the bed of the river.

Q. Do you believe it was worn away gradually by the water in calms? A. No sir.

Q. Was it worn away when it was stormy? A. Well, it depended very much on the action of the water. I don't think it took a storm to move it.

Q. You say "gradually," you mean it took years to do it? A. Yes sir, that was one reason, but any motion of the water, would naturally move the sand.

Q. If it had gone in storms, storm after storm, would it have been a gradual disappearance? A. No sir, it would not have been continual. I don't think I should if it was taken by violent storms exclusively.

Q. Did not violent storms take it in a great measure? A. It removed it undoubtedly.

Q. So that you could see after a violent storm that it had a sensible effect? A. No sir, not one storm.

Q. Do you remember the storm of 1836? A. Yes sir.

Q. Do you remember the houses being washed away? A. They were not washed away, but tipped over. The current had undoubtedly undermined it and tipped it over.

Q. Did it not wash the most of the bar away? A. I should think not, sir.

Q. What portion did it wash away? A. In the locality of that building it seemed to work in. If I recollect aright that was on the river side, and it undermined it.

Q. How wide was the bar at that time? A. I do not recollect distinctly.

E H. HADDUCK, called by the defendants, being duly sworn, was examined in chief by MR JOY, and testified as follows :



MR. McLEAN.—Are you one of the stock-holders of the I. C. R. R. Co.? A. No sir.

Q. How long have you lived in Chicago? A. I came here in the spring of 1833.

Q. Been here ever since? A. Yes sir.

Q. Were you familiar with the lake shore during early years? A. Yes sir.

Q. You had occasion to visit there frequently? A. Yes sir,

Q. Familiar with this sand-bar? A. Yes sir.

Q. How far north did that graveyard come? A. Well, I think the graveyard was somewhere near Washington street and extended up as far as South Water street.

Q. Have there been graves re-dug up within a short time in South Water street? A. Not perhaps in ten years.

Q. There were some not twenty days ago, as I saw in the newspapers? A. Yes sir, but that is away up on Water street, that is west from the shore. I speak of the shore. I remember distinctly of seeing a grave stone east of Michigan Avenue at South Water street.

Q. What struck you most distinctly when you came to Chicago? A. When I landed I discovered the coffins sticking out from the bank and dropping down, and I thought it looked rather ridiculous.

MR. HOYNE.—You thought it was rather unhealthy? A. I thought they didn't care so much for the dead.

Q. Was that inside of the sand-bar? A. Yes, inside of the sand-bar.

Q. Do you recollect seeing the waves dash across that sand-bar? A. Yes sir.

Q. How far toward the beach were they in the habit of rolling across? A. I should think the storms were in the habit of coming over it pretty near.

Q. In heavy storms didn't the waters of this end of the lake rise very high? A. Yes sir.

Q. Would not the rise submerge the bar? A. Yes sir.

Q. State how that bar disappeared, whether by slow or sudden process. A. I should think it commenced going off about 1835 or '36, and I guess it was going off up to 1845—perhaps later than 45.

Q. Where did it begin? A. At the south end, perhaps all along.

Q. Did it diminish in height as well as width? A. I don't know about that; I presume it did.

Q. State whether it was a slow process, continued until it got up to the pier, or a sudden one. A. I should think it was a slow process—a continual wearing away; sometimes it would wash in, and sometimes wash out, whichever way it might be.

*Cross examined by MR. McLEAN.*

Q. How long have you been here? A. I came in '33.

Q. How low did that bar stretch in 1833? A. I cannot tell exactly; but I think it run along so that some days you would see it, and some days you could not see it; part of it would be in the water. When it was low water the bar was further down than when it was higher.

Q. Where did the river empty? A. I think the most of it emptied near Madison street; may be a little above. It was a wide sheet of water.

Q. You say the graveyard extended to Water street? A. No sir; I think the graveyard proper was down to Washington street, but I think they buried along in the bank all the way up.

Q. It was about Washington street that you saw the coffins? A. I should think it was about Lake street, as high up as Lake street; perhaps further down; that is two blocks from the river.

Q. Have you ever noticed the effect a violent gale from the northeast had upon the sand-bar? A. It generally came over when we had a heavy gale; I presume it always came over.

Q. Did it wash it away? A. I presume it washed it away.

Q. Did it wash it away so that you could see the difference before and after the gale? A. I don't know that you could see any perceptible difference. I presume it washed away more or less.

Q. If there had been no gales upon Lake Michigan at all, do you suppose the bar would have washed away? A. It has been very difficult to tell whether the south gales made or washed it away.

Q. If the lake had been placid and calm would it have worn it away? A. No sir, I think not.

Q. Then it was during storms? A. It sometimes brought in material and filled it up, and sometimes carried it out. It depended on the wind.



Q. If it didn't wear away in calms, must it not have gone away in storms? A. It might have blown away.

Q. Do you think the wind blew it away? A. I think the waves took it away.

Q. You think they took it away in time of storms? A. Yes sir.

Q. How long did those storms last? A. Three or four days.

Q. A violent storm of three or four days would take it away some? A. Yes sir, I don't know.

Q. You didn't watch it, only knew of it as a citizen residing here? A. It gradually disappeared and went off. That is certain.

Q. You say it "gradually" disappeared, because it took so many years? A. Yes sir.

Q. Didn't it go storm after storm? A. I suppose so.

*Direct examination resumed by Mr. Joy.*

Q. Between a calm and a storm, are there not a good many sorts of intermediate gales? A. Yes sir.

Q. Ten, or twenty, or thirty, or fifty miles an hour? A. Yes sir.

Q. What would be the effect of the intermediate gales? A. They would sometimes wear and sometimes make, and the same way with a storm.

Q. The same, but not the same degree? A. Yes sir.

Q. During the five or six years that it was going away, did you ever observe it after one of those storms, to see whether you could mark the difference between the sand-bar before and afterwards? A. I never observed it particularly in a storm. I never observed any great difference before and after a storm.

Q. After the bar disappeared from the surface, did you ever see it? A. Yes sir. I have seen it dry out some ways. It would depend altogether upon which way the wind was as to the size of the bar. When the wind was off shore, I think it would appear down as late as 1845. I am pretty sure it would.

Q. How far south? A. Perhaps as far as Randolph street.

Q. You have seen it yourself? A. Yes sir.

Q. Have you seen it frequently when the wind blew? A. Yes sir.

*Second cross-examination by Mr. McLean.*

Q. How wide was this sand-bar in 1845? A. I remember from the fact that the people built a bath house up near the south pier—right by it—and there was a little strip of land lay there, I think as late as 1843 or 1845.

Q. Do you remember the storm of 1836? A. Yes, I was here.

Q. Did you notice its effect upon the bar? A. I observed it come over there as it had done before.

Q. Did you observe its effect upon that sand bar? A. No particular effect, except that it washed down the shanty.

Q. That storm was the same as other storms? A. I think about the same effect as other storms.

STEPHEN F. GALE, called by the defendants, being duly sworn, was examined in chief by MR. JOY as follows:

MR. MCLEAN—Are you a stockholder in the I. C. R. R. Co? A. No sir.

Q. When did you come to Chicago to live? A. In May 1835.

Q. Were you familiar with the sand-bar while it was in existence? A. Somewhat so.

Q. Did you ever go out shooting there? A. I never shot on the bar.

Q. Nor fished? A. Neither.

Q. State how it went away, suddenly or slowly? A. My recollection is, the process was a slow one.

Q. Very slow one? A. Yes sir.

Q. It went away very gradually? A. Yes sir.

*Cross examined by MR. MCLEAN.*

Q. Tell me how it went away—the manner? A. I cannot tell from my own observation.

Q. When you say it went away “gradually,” do you state that from observation, or from others? A. No sir, I mean from time to time as I saw it, it grew less and less.

Q. Did you have your attention particularly called to it? A. No sir.

Q. Have you observed it after violent storms? A. I observed it after the storm of 1836. I didn’t see it during the storm. I saw it after the storm had abated, but the water was still high. As I saw it then, the water was washing over.

Q. It was covered? A. No sir, not entirely.



Q. Was a large portion of it covered? A. I should think perhaps one half of it was covered by water from that storm.

Q. The same storm that toppled the shanties? A. Yes sir. I remember it was a very violent storm. I did not see it at the time.

Q. Is not your idea that it went away gradually, because it took a number of years? A. Yes sir.

Q. But don't you suppose it went storm after storm during those years? A. I think storm after storm had an effect upon it.

Q. Don't you think every violent storm took away sensibly a portion of that sand-bar? A. I think every storm might have taken a portion of it.

Q. Do you believe the lake, without any storms upon it, would have destroyed that sand-bar? A. That would bring up the question of the piers. My idea about the action of that is, that if these piers had not been constructed, it would have continued perhaps to this time.

Q. After the piers had been constructed, do you suppose a calm lake would have destroyed that bar, even with the piers? A. In a calm lake I should think not.

Q. Then a visible effect upon it was produced by storm I A. Well, it never was marked by any particular storm. In regard to that storm of 1836, I didn't observe it until after the storm had entirely abated, but I did see it after the storm had passed its height and the shanties were toppled over—that is, one side of it dropped down.

Q. Have you ever had your attention called to the fact of its washing away? A. No sir, not particularly.

Q. Might it not have been washed away in violent storms—portions of it—and you not know anything about it? A. Yes sir, I suppose so.

Q. Then it is only from casual observation that you testify? A. Yes sir, that is all. I observed it gradually diminished.

Q. But you put in that word “gradually” diminished. You say you observed it from time to time, and that it “gradually” diminished? A. Yes sir.

Q. How do you know whether, between that time, it diminished gradually or by a storm? A. I don't know particularly.

Q. Then this diminution in the size of the sand-bar from one time to another, might have been caused by a violent storm? A. It might have been so, sir.

PHILIP DEAN, called by the defendants, being duly sworn, was examined in chief by MR. JOY, as follows :

Q. Do you live in Chicago ? A. Yes sir.

Q. How long have you lived here ? A. I came here in July, 1833.

Q. Lived here ever since ? A. Most of the time. Some two or three years I did not.

Q. Were you here before the piers were put through ? A. Yes sir.

Q. Do you recollect this sand-bar ? A. I remember it.

Q. Do you remember seas breaking over that sand bar ? A. Yes sir, it is the wind blowing down this way, raises the water considerable—some I suppose.

Q. Have you ever seen that sand-bar submerged by that process ? A. Yes sir, a good many times.

Q. Water all over it ? A. Yes sir

Q. Was that generally the case in very severe storms here from the north, according to your recollection ? A. What I call the sand-bar, when I came here, used to be about where the Central Railroad is, and there was a little belt of the land along, about a hundred feet wide, and the main bank some twelve or fifteen feet high.

Q. That you have seen submerged by the rise of the water—that is, the sand bar ? A. Yes ; I mean these little lots of land along there [pointing it out on the map].

Q. State how that disappeared—whether by a sudden or slow and gradual process. A. By a very slow and gradual process.

Q. How many years was it ? A. When I came here I found out down at ——'s and along the lake shore that this was a bad place to come to, because the lake was washing up the graveyard—washing up the bodies, and I saw it had washed some away. I worked on that lake shore that fall, and clear up to November, and I noticed that every time I was there getting my dinner, at work, I would see this bank coming down, and that bank worked along in and right opposite from Michigan Avenue. I suppose that main shore was three hundred feet wider.

Q. You mean the bank west of the river ? A. Yes sir. That is wearing down, I judge, since the bar wore away too, because it kept about the same distance coming up towards the shore, when the bar finally disappeared. The main shore disappeared all the time, and the bar, after a while,



didn't get so very much narrower. Down along from Lake street, south, there wan't much of it. as I know of.

Q. What part began to disappear first? A. Well, there was a little channel where they said the river used to run along side of the bank. That filled up; that is, what we called the bar disappeared, I suppose. It disappeared by the sea filling in and the sand-bar being driven in, I infer from the sand bar's being driven in.

Q. It gradually filled it up? A. Yes sir.

Q. How many years before the bar was lost in the bed of the river? A. I watched it steadily for fifteen years. I teamed it then for a living, and I used to work on the lake shore considerably, and it worked in from 1833 to 1849. It gradually came over in the spring of 1834, and there wan't no river there. In the spring it washed the river pretty well in.

Q. The lower end had stopped up, and the sand had been gradually filling in? A. Yes, the sand had come in and filled it up.

Q. The sand kept still passing in there? A. Yes. The way I know that fact, I went to church, and Elder Freeman announced that there would be baptism at the foot of Washington street. There was no river there then. We went across the sand-bar, across to the lake, and there was no bed of the river.

Q. When was that? A. That was about the first of March, 1834.

Q. Do you recollect whether the waters were low, or high, at that time? A. I didn't know about that. I learnt more of that from hearing them testify here.

Q. When did the channel begin to disappear? A. Well, sir, the channel of the river filled up in August, pretty nearly, at times—in August, 1833—and then it blowed that out again; and then it filled up again in the spring of 1834. All I know about it is, that bar kept working along in, until the sand-bar finally disappeared.

Q. And that for a process of several years? A. From 1833 to 1849.

*Cross-examined by MR. McLEAN.*

Q. Do I understand you to say that in 1834 there was no water between that bar and the shore? A. At times there was.

Q. When you went down to that baptism, there was no water there at all? A. No sir.

Q. At what street was that? A. It was announced "Washington street," and I suppose it was Washington.

Q. From Washington street up towards the pier, was there any water between it and the main shore? A. I should think, may be, six inches in some places, and may be none in others.

Q. How wide? A. It was crooked along there, and about fifteen feet wide, and some places none at all, and some places this deep [showing].

Q. Then it was in pools, was it? A. Yes; up as far as Lake street, and at Lake street there was a big pond. From Lake street south, I mean.

Q. You say this bar outside of that went away gradually and slowly? A. It must have been very gradually.

Q. How did the storms affect it? A. You've got me now. All I know is, the storms straightened up this bank; when it was still, it sloped itself again. I never saw any material difference at any time.

Q. Do you suppose that was washed away by the calm waters of the lake? A. Well, I suppose the waters, dashing over there into the main land, kept sloping that bank, and kept along and kept passing it.

Q. Didn't it dash over in heavy gales of wind? A. Well, it dashed over any time there was any waves.

Q. Any waves at all? A. Yes sir; they would have to be pretty small if they didn't go over.

Q. Do you remember the storm of 1836? A. I was not on the ground.

Q. Do you remember the storm? A. Yes.

Q. Do you remember any effect upon the bar? A. I don't think I ever noticed it, except it made the sand-bar a little higher, and where it was still the bar gradually sunk away a little.

Q. Then the effect of heavy northeast gales was to increase that bar as to height? A. Yes, as to height.

Q. And when it got calm again the bar would gradually disappear? A. Yes sir; that's the way the sand-bar would work away.

WALTER KIMBALL, called by the defendants, being duly sworn, was examined in chief by MR. JOY, as follows:

Q. How long have you lived here in Chicago, sir? A. I came here to reside in the fall of 1833.



Q. Have you been away at any time since that time?  
A. I left here in 1839, and returned in 1844.

Q. Do you recollect the sand bar that stretched out south of the south pier? A. Yes sir.

Q. About how high was that bar above the water when you first came here—near the pier, and the further down?

A. I should think it was from three to four feet above the water, near the pier.

Q. How high, say a hundred feet below that? A. Probably from two to three feet. It tapered off gradually to a point.

Q. Do you recollect whether the seas used to break over that sand-bar, from the time you first knew it until it finally disappeared? A. Not from the time I first knew it. I think from the time the piers were extended there, some time afterwards, the seas began to break over the lower point of it—over the southern portion.

Q. How far up would that extend? A. I cannot exactly state; I should think perhaps a quarter or a third of the distance, as it tapered off.

Q. State about the mode in which it disappeared—whether by a slow and gradual, or a sudden process, and in how long a time, according to your recollection. A. I think it had pretty much disappeared in 1838 or '9. The sand-bar disappeared more rapidly in violent storms from the north and east.

Q. Commencing at what point? A. From the southern point, and gradually working up towards the pier.

Q. When was that first affected by the storms, at the south point? A. I think very soon after the piers were run through.

Q. And it was continually wearing down until it got up to the pier? A. Yes sir.

*Cross examined by MR. MCLEAN.*

Q. Do you think this extension of the piers caused the destruction of the sand-bar? A. Yes sir; I think that is the cause to which is attributable the wearing away of the lake shore.

Q. Did it not disappear in storm after storm? A. Yes sir; it disappeared after a heavy storm more than at other times. I suppose it would not disappear scarcely perceptibly at all in a calm, or ordinary weather. I have noticed the rapid disappearance of it, and also the bank below,

during a heavy north storm. During a storm it disappeared more rapidly than at other times.

Q. Do you remember the storm of 1836? A. Yes sir. I do not remember particularly the effect of that storm upon it, although I probably saw it at the time. I have no distinct recollection of the effect of it upon that bar at the time.

Q. By a "slow and gradual disappearance," you mean the length of time it took to disappear, but the portions of it disappeared in the storms occurring from time to time?

A. Yes, it disappeared more rapidly during those storms. Probably it was disappearing gradually during the whole time.

Q. Do you know that? A. No, I do not know that I do sir.

Q. But it did disappear more rapidly during storms, than it did during calm weather? A. Yes sir.

Q. You say this did not disappear at all before the erection of the piers? A. Not that I know of sir. I came here in the fall of 1833, and the piers were not finished. I was there when the waters run through the first time.

Q. Do you remember how far south the river ran? A. I do not remember. I think it was somewhere in the vicinity of Washington street.

Q. Have you a general recollection of the width of that bar? A. My impression is, that about the average width of it would be not much over a hundred feet. Perhaps it was over.

Q. Wider at the piers? A. Yes sir, and tapered off towards the point. Probably it was 150 feet.

*Direct-examination resumed by MR. JOY.*

Q. [Presenting a map.] Would that give you a general idea of the sand-bar? A. I do not remember it precisely in that shape. It always appeared to me to be wider toward the pier, but tapering off. I think when I saw it, it was tapered off. [Taking the Hathaway map], I think that is rather more according to my idea of the shape of it—rather more than the other one.

Q. You have spoken of the process of wearing away as being probably more rapid in a storm. A. Yes sir.

Q. Do you recollect at any one time, noticing by the eye the difference which was made there in any one day, by the action of the winds and the waves? A. Yes sir, I think



so. I think it would be very plainly to be seen—the change in the appearance of the bar during a heavy storm.

Q. Do you mean all along it? A. Well, the lower part of it where the water had a greater action upon it—a greater force. It would wear away more rapidly.

Q. How many years was it wearing away? A. My impression is, it was pretty much gone in 1839.

Q. You are Clerk of the Superior Court? A. Yes sir.

Q. [Presenting the papers in the cases of *Collins vs. I. C. R. R.*, *Chicago Hydraulic Co. vs. I. C. R. R.*, and *Walker vs. I. C. R. R.*] Are those the files of suits where bills in Chancery were filed against the I. C. R. R.? A. Yes sir.

Q. Can you leave them with the Clerk? A. I will leave them with the Clerk of the Court here.

MR. JOY stated that some of the jury had asked to have the printed report of the evidence in the case, as taken by the Reporter and printed from day to day.

MR. MCLEAN stated that he had no objection.

THE COURT suggested that, with the consent of counsel on both sides, a copy be placed in the hands of each juror.

MR. HOYNE, after some further discussion, said that some of the jurors thought they had better not have it until the evidence was completed. So the matter was dropped.

THE COURT adjourned until 9 o'clock to-morrow morning.

#### SIXTH DAY—TUESDAY, NOV 15TH, 1859.

COURT met at 9 o'clock, and the jury being called, the trial proceeded.

MATTHEW LAFLIN, called by the defendants, being duly sworn, was examined in chief by MR. JOY, and testified as follows:

Q. Were you acquainted with the lot of the Hydraulic Company, that they sold to the I. C. R. R. Co.? A. I was.

Q. Were you President of that Company? A. No sir, I was a Director.

Q. How large was that lot? A. I think it was seventy or seventy-two feet front on Michigan avenue, running back into the lake.

Q. Running back into the centre of Lake Michigan, as you thought a few years ago? A. I supposed so.

Q. What was that lot occupied for? A. Occupied for water works, for watering the city.

Q. Was there a pier upon that lot, extending out into the lake? A. There was a pier put on there in 1840 or 1841.

Q. How far did it extend? A. The first pier extended out about two hundred feet, and the next pier one hundred and fifty feet further. It was extended again in 1846 or 1847—I don't recollect exactly—about three hundred and fifty feet more; making about seven hundred feet out into the lake.

Q. Did it remain there when the I. C. R. R. came and located their depots? A. Yes sir.

Q. Did the Hydraulic Company file a bill against them, for interrupting their flow of water? A. Yes sir.

Q. Had a great controversy with them? A. Yes.

Q. And made them pay? A. Made them pay for all we could—made them pay tolerably well.

Q. How much money did you get for your lots and riparian rights? A. \$50,000.

Q. Did the Hydraulic Company deliver possession of that lot to the I. C. R. R. Co. when they bought it? A. I believe they did, together with Mr. Woodworth.

Q. Do you know Mr. Walker, who lived on these lots that were sold to the Company? A. Yes sir.

Q. Were they in possession of them at the time they sold them?

MR. MCLEAN objected to this kind of testimony as irrelevant.

MR. LARNED, MR. JOY, and MR. MCLEAN, in succession discussed the subject.

JUDGE DRUMMOND thought the better way would be to hear the testimony within a reasonable limit, so as to save any unnecessary consumption of time, and then let the Court instruct the Jury as to its nature and weight. He hear more evidence before deciding.

JUDGE DRUMMOND—[Presenting a Map to the witness]—Where was the water-line? A. It was lot No. 6; this was the east boundary at that time [the water]; the pier ex-



tended out 700 feet from that water-line into the lake, from the east line of the east boundary of Fort Dearborn Addition.

Q. Was that pier covered with water? A. Yes sir, part of it, and part of it was out—the first 350 was; the other was clear sunk in the water.

MR. McLEAN.—Carrying pipes? A. Yes, carrying pipes in a pier; that up near the top of the water. No, I am mistaken; the first pier was built out 350 feet, and then we put it all down on a level; it was under earth and under water, carrying pipes. We put a pier out 200 feet, and then 150 feet more, and then 350 to that. The first 350 feet was in the pier, and the rest was in under water and under earth. We had to sink it down into the earth. When I first came here, the water of the river ran there [pointing].

[The distance, 700 feet, being measured by the scale attached, on Greeley's Map No. 1, it appeared to extend into the location of the sand-bar.]

JUDGE DRUMMOND decided that the possession and anything relating to the *possession* of this property might be shown, but not the price paid by the I. C. R. R. Co.

MR. JOY.—What was built at the end of that pier? A. A crib was built there to protect it from the ice or anything at the end of this hydraulic pier. The object of that was, to protect the end of the pier in the water, so that it would not fill up. That was four or five feet under water.

Q. This was at the end of the 700 feet? A. Yes; it might be a part and parcel of the 700.

Q. The Hydraulic Company sold that lot to the I. C. R. R. Co.? Objected to. Objection sustained.

Q. Did you deliver that lot, including its appurtenances, to the I. C. R. R. Co.? A. I suppose we did. That was the intention.

JUDGE McLEAN.—They took possession? A. Yes sir.

JUDGE DRUMMOND.—If there was any livery of seisin, he may state it; but I don't think you can prove that.

MR. JOY.—Did the I. C. R. R. Co. take possession of it, and have they since been in possession of the property? A. They have, sir.

Q Including as well the lot, as the place where this pier and bulkhead was extended into the lake? A. Yes sir.

Q. Did this controversy along the lake shore excite a great deal of attention here? A. Yes.

Q. Everybody knew all about it—the newspapers discussed it? A. Yes.

Q. Some new legal questions raised, which were discussed by the bar around here. A. Yes sir, I believe so.

*Cross-examined by Mr. McLEAN.*

Q. Was this a chartered company? A. Yes.

Q. Have you a copy of this charter? A. Its in the Statutes. It was chartered in 1836

Q. Was it by virtue of your rights under that charter, that you extended these piers? A. I could not say, sir, what view was taken at the time.

Q. What was that company chartered for? A. For watering the city of Chicago—supplying the inhabitants.

Q. Were these pipes, by which you say you had possession of that slip along there, for the purpose of getting water from lake Michigan? A. They were.

Q. What was the width of the pier in which these pipes were laid? A. I think the pier was about six or seven feet wide. I don't recollect exactly.

Q. Then all the possession you had, under that charter, of that 700 feet, beyond where your lot extended, was this six or seven feet in width? A. That was all we occupied.

Q. You occupied that for the purpose of getting a supply of water, under your charter, for the citizens of Chicago? A. Yes sir. I will correct myself in one respect. I think this crib, at the end of this pipe, was probably ten or fifteen feet, wider than the other. I think probably it was fifteen feet.

Q. After your agreement with the I. C. R. R. Co., were these pipes taken up? A. I don't know as they were. I don't recollect.

Q. Was it ever used afterwards to supply the city with water? A. No sir.

Q. That was abandoned then by the Hydraulic Company? A. Yes.

Q. Had it been abandoned before that? A. No sir, I don't think it had.

Q. What time were the new Water Works established? A. I don't recollect. I think 1855 or '56.

Q. Were the works in operation at the time this agreement was made with the I. C. R. R. Co.? A. I don't believe they were.



Q. You think these were put out there to get water for the city of Chicago? A. Yes.

Q. After that agreement the place was abandoned by the Hydraulic Company for that purpose? A. Yes, we sold it to the Railroad Company, it was no longer used.

Q. What became of these pipes? A. I don't know what became of them. I don't know but they were filled in with the rest of the ground out there. I don't know what was done with them; they were never used for getting water out there as I know of.

Q. Did that Company continue in operation in another place? A. No sir.

Q. There was a new company established? A. The city did it.

Q. What was the date of that charter? A. '36.

Q. Does the pier extend out in a straight line? A. Nearly so. That was the intention—to keep on our north line.

SETH P. WARNER called by the defendants, being duly sworn, was examined in chief by Mr. Joy, testified as follows:

MR. MCLEAN.—Have you an interest in this road? A. I was a stockholder in it. I am not now.

Q. Were you engaged in the construction of this pier of the Hydraulic company at one time? A. Yes sir, I worked for the Hydraulic company more or less, for a year or two, —two years, more or less.

Q. What time was that? A. I think I didn't go to work there until '41. I can't tell the date.

Q. Is there any incident to enable you to determine how deep the water was out on the sand-bar? you were here in 1841? A. Yes, I came here in 1836.

JUDGE MCLEAN.—What was the depth of water there, beginning at the end of the pier, and going east to the extent of 700 feet? A. Well, we could wade from the shore out that way. We would frequently go out and wash in the evening, and we could wade out, I don't know how far but several rods. We thought nothing about the sand-bar. It grew deeper and deeper as far as we could walk.

JUDGE MCLEAN.—How far was that? A. I should suppose from 300 to 500 feet.

Q. Did you ever have a little boy fall in there? A. I had two boys in there. That was about 350 or 400 feet

out. They were out fishing and playing there—400 feet out; and one of them fell in, and the other jumped in after him. One of them succeeded in getting across to the old bar, which was then visible, coming down from the main government pier, down towards this pier.

Q. He came from this pier, where you were at work, up to this bar? A. Yes, it was not very deep. The water coming from the main pier around the Hydraulic pier, made a deep channel; go in fifteen or twenty feet, and you would come to water of over two feet; but south of this it was deep—four or five feet. A little north it was two feet; and from that it run up to that bar very soon. The bar was miserable at that time, after you got up toward the pier.

Q. This boy was up to his middle? A. Yes sir; and I recollect seeing a drayman saw him, and drove right in to him to help him out. He was drowned, I supposed when I took him; a drayman was on Water street, and saw him, and whipped his horse in as hard as he could to get to the boy and save his life. The horse went in clear out to where the boy was. I couldn't go in to where the boy was, that was drowned. That was about 400 feet out. I recollect a little house that was out at the end of this pier.

*Cross-examined by MR. McLEAN.*

Q. Do you say this was so shallow that the drayman trotted out there, and it only came up to the knees of his horse?

A. Yes sir, he drove out there. I don't know how it was where the other boy was.

THE COURT—He passed to where the passenger depot now is? A. Yes sir. Out there where the boy was; it was about two feet deep.

Q. What year was that? A. I don't know as I can tell you. I was there a year or two—perhaps more. It might have been '42 or '43. I should think the summer of '42.

Q. How far down from the south pier did the land extend at that time? A. Well, I should think perhaps half way from the pier to the Hydraulic Works. Perhaps at times a little sand might be seen farther down.

Q. Half way down from the south pier to the Hydraulic pier, you suppose the land was visible? A. Yes, at times, when the water was low, the wind would rise as we all know it did, and it would be shorter.

Q. Were you here when the Hydraulic Company abandoned their works? A. Yes sir.



Q. What became of the pipes? A. I reckon they were filled in. I recollect seeing one of the pipes sticking out of the water entirely. I think, however, the Railroad fixed it, for the time being, so as to get a little water, and we could get water for the city.

Q. It never was used for the Hydraulic Works since?

A. No sir.

Q. The buildings were taken away and the piers destroyed?

A. O yes; where the Adams House is, is the lot. The pier was built directly straight east of it.

Q. Did I understand you to say, it was deep water one side of the pier and shallow on the other? A. It was shallow on the upper side after, you got away a certain distance? The current running around the south pier, came around here and formed a channel, but south of it you could go out as far you could walk. We frequently were there in boats, but you could walk out four or five hundred feet.

MR. LARNED.—Do you say that starting from the Hydraulic pier, as it was built you waded out directly east from that old pier? A. Yes sir.

Q. Do you mean you could walk out to the 350 feet of that pier? A. We could walk out 350 or 400 feet. We could go out as far as the pier extended. Out there is where the boy got in. I ran and jumped in, but couldn't manage myself, because the water was too deep, and it was all I could do to take care of myself.

Q. When you got out to the end of your pier, did you come to deep water opposite the end of that pier? A. Not very deep; no particular change.

Q. How far beyond the end of the pier before you came to what you call deep water—over your depth? A. You would find water very soon after you came to the end of this pier, where you would find you could not wade.

Q. How far? A. At times you could go out sixty or seventy feet further. It grew deeper gradually, and became clay out there. After a certain time you came again to where it was very shallow. That was going directly north to the end of the Hydraulic pier, meeting the old bar, coming down, which I spoke about.

Q. Going in a straight line right out eastward, would you come to that shallow water or not? A. No sir, not to my knowledge.

Q. How far north, on a line parallel with the pier, would that line be which would lead you to the shoal water? A. My boy was twenty or thirty feet from the end of the pier, and he was standing on the south end of the bar, where it was about two feet deep.

Q. Then a line twenty or thirty feet north of the pier, extended, would bring him to the shallow water again?

A. Yes, about two feet deep.

Q. Have you ever waded out to see how far that shallow water extended? A. I have been from the bar to the pier repeatedly—going out there washing. I went out and came back again.

Mr. WILLS.—You say you commenced operations there in 1841? A. I think it was 1841. I think Harrison was elected in 1840, and I was in Ohio in 1840, and in 1841 I went to work.

Q. Did you know of the petition sent to Congress, asking Congress to protect the shore along east of Fort Dearborn Addition? A. I don't think I did sir.

Q. Do you know that after Fort Dearborn Addition was laid out, the waters encroached the original boundary, and cut away considerable from those lots? A. Yes sir.

Q. Was not the original eastern boundary of this lot, upon which the Hydraulic works were located, considerably diminished by the action of the water? A. Well, it is rather my impression that it was not.

Q [Presenting witness a map.] Here is a survey made in 1840. [Explains the localities?] A. Here is the land it might have washed away. I know the land north of it, even as high as Walkers and Collin's did.

Q. Then the 700 feet commenced from the then existing shore, and not from the original lake shore, boundary of your lot, according to the Fort Dearborn map? A. I understand that this 700 feet is taken from the east side of the Hydraulic buildings.

Q. How far is that from Michigan Avenue? A. Well sir, I can only guess, it might have been 120 or 150 feet. I think they had not less than 120 feet of buildings there.

Q. And did this pier commence immediately at the end of those buildings? A. Yes sir, right up to the east side. In the first place, it was brought up with a large cast-iron pipe for sucking the water up, and afterwards they took that up and put down the wooden pipe under water.



Q. The whole pipe was under water? A. Yes sir, and under ground, I think. I think the 700 feet began at the east side of their buildings. They first put up that 200 feet to the bed of the old river, and it came on storms, and made land so quick, that this was perfectly high and dry, and they went on and put on a piece 250 feet more, and that remained two or three years more, and then they put another piece. Before they had used that 200 feet, the land had made, so that it was high and dry, and the end of the first 200 feet rested on the solid land. It was so before they even used it. They put up 150 feet more, I think, and that remained. I don't know as they filled out to that, but they put on the extension to get out to better water.

Q. How far did it fill out—to the end of the 150 feet? I don't remember, it might have filled out more. I cannot say. Understand me. It wasn't all water; when they put it out. When they put out this 150 or 200 feet, there might have been 75 feet in the water.

MR. LARNED.—You started from your buildings, and laid 200 feet of pipe, but before you began to use that, it was solid land? A. Yes sir.

Q. And then you put out 200 feet more, and the land extended out to that? A. Well, it might have extended to 100 or 150 feet more. I was not working at it when this 300 feet was put on. I knew very well they were doing it.

MATTHEW LAFLIN recalled by Mr. McLean.

Q. What was the date of your charter? A. I think it was 1836.

Q. [Presenting a volume of the Statutes] Is that it? A. Yes sir.

MR. McLEAN read to the Court “An act to incorporate the Chicago Hydraulic Company,” dated January 18th, 1836.

MR. JOY offered in evidence the papers in bankruptcy of Henry Moore, including the petition, with a schedule of property attached, and the return of the assignee of the sales of the property.

MR. McLEAN objected to them, and proceeded to argue against their inadmissability.

MR. JOY replied, when the Court took the papers for a further consideration.

J. D. WEBSTER, called by the defendants, being duly sworn, was examined in chief by Mr. JOY, and testified as follows:

Q. Were you ever in charge of the harbor and public works here. A. Yes sir.

Q. When? A. From the fall of 1848 till the spring of 1854, I believe.

Q. Six years? A. Yes sir.

Q. Were you in charge of the public works when the contract was made by the government with the I. C. R. R. Co. to sell a portion of the government property here? A. Yes sir.

Q. Was the government in possession of that piece of property, which it sold to the I. C. R. R. Co? A. Yes sir.

Q. You had charge of it? A. Yes sir.

Q. How long did you have charge of it and occupy it for the government? A. Well sir, from the fall of 1848, I believe, until it was sold. I don't recollect the date of the sale.

Q. The sale was Oct. 14th 1852? A. Yes sir.

Q. Was this a sale that was considerably talked about in the city, and were appraisers called in to appraise it? A. Yes sir, I think some three or four or five—I think five appraisers.

Q. How long was the negotiation pending between the city and the government? A. Well, I could not answer definitely, I think some weeks, probably five or six weeks.

Q. Is this immediately south of McCormick's property on the north side? A. I could not answer that without looking at the map.

Q. [Presenting Greeley map No. 1,] these are lots 26, 7, 8, 9, are the McCormick lots? Then Michigan Avenue is very nearly south, that would be south from Mr. McCormick's lots, directly south.

Q. Was Mr. McCormick living here in the city at that time? A. I do not know, sir, whether he was living here.

MR. McLEAN objected to evidence of Mr. McCormick's knowledge of the I. C. R. R. Co.'s improvements, or of his silence during their progress, as immaterial to the issue.

MR. WILLS proceeded to argue the inadmissibility of such evidence, when

COURT took a recess until three o'clock.



## AFTERNOON SESSION.

MR. JOY replied to Mr. Wills' argument.

MR. McLEAN rejoined, closing the discussion, when  
COURT adjourned until nine o'clock to-morrow morning.



## SEVENTH DAY—WEDNESDAY, NOVEMBER 16th, 1859.

COURT met at nine o'clock.

JUDGE DRUMMOND delivered the opinion of the Court on the question under discussion yesterday afternoon, overruling the objection raised by the plaintiffs, and admitting the testimony subject to the instructions of the Court in relation to its effect.

J. D. WEBSTER recalled for further examination by Mr. JOY.

Q. State what agency you had in the sale of that land—how far you acted in it, and what was done here in the city in regard to it. A. Well, as near as I recollect, I had orders from Washington—I think the first I got was an order from the War Department—to have the land appraised by some persons here, whom I should judge suitable for such a purpose, and send that appraisal, with my own opinion of the value, to Washington. I attended to that. I do not recollect, now, whether the number was three or five; but I think five were appointed to appraise it. They came to my office, and made up an appraisal, a copy of which I forwarded.

Q. Do you recollect whether, at that time, the location of the I. C. R. R. Depot had been made at this city? A. I am not sure it had been made. It had been talked of.

MR. LARNED.—What time was this? A. I don't recollect, now, the date when the sale took place.

Mr Joy. Oct. 14th, 1852? A. Yes sir, I have not refreshed myself from any documents, and they have gone out of my possession, since my resignation, five years ago.

Q. Do you recollect whether Mr. McCormick was one of those appraisers? A. I think not sir.

Q. You knew Mr. McCormick very well at the time?

A. No sir, I am inclined to think I did not know him at the time.

Q. Was Mr. William B. Ogden one of the appraisers?

A. I do not know, I should think most likely he was. He was a person I would be likely to call upon. Mr. Newberry was I think.

Q. You sent their appraisement with your certificate or endorsement to Washington? A. Yes sir.

Q. Was this deed afterwards transmitted to the I. C. R. R. through you? A. Yes sir, I think it went through the office.

Q. [Presenting a document.] Is that the deed? A. Yes sir, I think so.

Q. Is the piece of land described in that deed, directly off Mr. McCormick's works, on the north side of the river?

A. I think it is sir. [Taking a map,] I recognize this map.

Q. That is your own official act? A. Yes sir, under my direction, I suppose this very copy was made from mine at the War Department, probably the original copy was there I know the handwriting to be that of a clerk in the War Department.

Q. Was this a tract attached to the Hospital, a public ground and of which you were in charge? A. Yes sir, what we call the reservation.

Q. That was a part of the reservation? A. Yes it was so considered at the time.

Q. You were claiming it, and held it? A. Yes sir.

Q. Occupied it, and exercised jurisdiction over it, and kept off intruders? A. Yes.

Q. And kept the I. C. R. R. Co. off until they paid for it? A. Yes sir, until that deed was transmitted through me.

Q. Can you state the date of that appraisment, and how long their negotiations were going on? A. I think some weeks, but I do not know.

MR. McLEAN.—[Presenting a document.] Is that it?

A. That is the appraisement, there are the names of the



appraisers, [reads the names of the appraisers, Chapin, Richmond, Rogers, Sherman, Ogden, &c.]

Q. There are more appraisers than you thought? A. Yes sir. I thought there were five. It is dated August 31st, 1852. That negotiation was going on some weeks—I could not say how long.

Q. This refers to a report made at a previous time? A. No sir, this is the very report—"Report of Lieut. Webster, in relation to a lot wanted for Railroad purposes," &c. This is the deed upon which I made that report.

Q. Do you remember Mr. McCormick's living here in the city, at that time? A. I presume he was; his business was going on, on the north side.

Q. On the northern end of the very lots they claim? A. Yes sir. I think so.

Q. Did he ever set up any claim to that land while the works were going on.

Objected to, and question withdrawn.

Q. While this question was pending between you and the I. C. R. R. Co., did Mr. McCormick ever caution you against selling any land belonging to him there?

Objected to and objection sustained.

Q. [Presenting Graham's map "G 52."] Does that indicate the position in which a sand-bar is forming off the harbor? A. Yes sir, the position in which it was forming, during my acquaintance with it, and I presume it is yet.

Q. Is that a sand-bar represented on the north side? A. Yes sir, and this is on the south side. These figures indicate the soundings. That yellow indicates the formation of the sand-bar.

Q. Do those lines indicate the direction which that current takes at the end of that pier? A. Yes sir,—very nearly. It indicates the direction that the main shore current takes along shore.

*Cross-examined by* MR. McLEAN.

Q. At the time indicated by MR. JOY, did you know Mr. McCormick personally? A. I think not, sir. I am not sure.

Q. Then have you any personal knowledge of his being in the city at the time, or do you judge that he must have been here, from the fact that his Reaper Works were going on? A. That is all. I have no personal knowledge, that he was here at the time, at all.

Q. State to the Jury, what, in your opinion, as a man acquainted with subjects of that sort ; has been the cause of the destruction of that sand-bar, so far as it has been destroyed ?

MR. WILLS.—Call it a *sand-spit*, Captain ? A. Yes sir, I understand. I think it was carried away in consequence of the pier being put there. The north-east storms, which wore away the shore, still continued to act on the bar, as they do all along this coast ; but the pier being put there stopped the sand, which would otherwise keep up the supply on the sand-bar. What I have maintained is, this stops on the north side. The north-easters, which do the principal part of this abrading, bringing the waves down in this direction, cause a current along the shore. The first action of this current is to disturb the soil on the shore ; the wave then rolling back carries it out, and this main shore current carries it off to the south.

Q. Explain what storms it is, and from what direction they come, that would carry off the bar, and destroy its A. From the northeast, generally—from the north to the northeast. Sometimes it is the surf that does the breaking upon the shore.

Q. Does that have a visible effect upon the land, after violent storms, and can you see the effect of those storms in the destruction of the land ? A. Yes sir, you frequently can.

Q. What would be the effect of a south wind upon such a tongue of land as this ? A. If it had any effect at all, it would set it back against the pier, probably. Probably the south wind would abrade this portion and set it in, and fit it in the angle in here.

Q. Then a northeast gale, coming in this direction, would strike against the north side of the north pier, and accumulate sand, and consequently accumulate the land on the north side of the pier ? A. Yes.

Q. The southwest wind, from the contrary direction, would strike the south pier, abrading here, where it was unprotected, and striking up there, would accumulate the sand at the south pier ? A. No sir ; the southwest wind would produce no effect at all.

Q. A southeast wind, I mean ? A. Yes sir, that would do it.

Q. The northeast wind would accumulate it on the north



side, and the southeast wind accumulate it on the south side?

A. Yes sir.

Q. That is your opinion as a scientific man? A. Yes sir; the effect is more rapid on the north side.

Q. You say a southwest wind would have no effect? A. Yes sir; it makes smooth water, and would have no effect.

Q. What effect would smooth water have upon the sand-bar, as to preserving or destroying it? A. No effect at all.

Q. It would remain then? A. Yes sir.

Q. Then it must have been carried away in violent storms? A. Well, in storms, I don't know the violence, small ones would produce some effect, but the winds I suppose, would do it, coming of the lake, in such a direction as to produce an action on shore.

Q. Give me your opinion, based upon your knowledge, and your experience here with the lake, as to the cause of the destruction of that sand-bar. You know when it was?

A. Yes, I know when tradition assigned it. The outer part was all gone, when I came here. I suppose it occupied this position [indicating] I suppose, as I said, it was due to the erection of the piers there. But my opinion varies a little from some persons in reference to that.

MR. JOY.—Explain your opinion fully. A. I think the first action in carrying it away, was this: the surf striking it, disturbed the sand in its position upon the shore when it is exposed to its action. Then the receding wave carries it back, and the shore current takes it along with it. I think that action is going on for twenty miles north of here in a storm—and at any point north of here, yet, in all places it is not going on, because it is arrested at some places by accidental circumstances, on this side of the lake, and then it seems to go on again; but while going on, that seems to be the action. Frequently the shore shows no effect off the abrasion, because what the storm takes away south, it supplies from further north. At this place the pier cut off that supply, while the action on the sand-bar went on nearly as powerfully as if that pier had not been there.

Q. You mean the action of the water caused it? A. The action of the storms—the winds—and the waves.

MR. JOY.—Great and little? A. Yes sir, any wave powerful enough to disturb the sand on the shore, would affect it because the sand on the beach must be first taken away.

If you had a slope of sand of sufficient extent, it would not reach up to the bluff bank. It has then to abrade the beach, so that the waves can reach the regular bluff. Here the supply was cut off by the pier, and the action of the waves upon the sand-bar still went on, just as they did before, or very nearly so. Probably there was a little difference in the direction the waves would strike the shore, and perhaps their effect was a little lessened, but still powerful enough to produce an effect. It is a fact familiar to every one here that if you put out a pier anywhere along this coast, anywhere this side of Milwaukee, and at Milwaukee, though not in the bay, for that depends on other causes, the beach makes on the north side, and washes out on the south side.

MR. JOY.—It stops it on the north side, and removes it on the south side, as before? A. Yes sir, the effect goes on; and it is washed away.

MR. WILLS.—What effect did the diversion of the river's old mouth have upon the sand-bar? A. Well, I think the effect is unimportant. I think the sand-bar is the creation of this current; the sand-spit was deposited from material brought along shore, and not, as in case of many rivers, from materials brought down the river.

Q. What caused the deposit at the mouth of the river? A. The check of the river current meeting that of the shore current probably had some effect in causing it to drop down there—it making an eddy—perhaps not making an eddy, but producing a check in the current. Sand requires a certain velocity in the current to be carried along. If you check that velocity, it subsides and settles. I think that is about all.

Q. Then your theory is that the bar was the creation of the conflicting currents of the lake shore and the river? A. It assumed that precise shape from these causes. There was the material there for it, and it took its shape from this cause; but the same amount of material would have been brought along, whether the river was there or not—very nearly the same, not absolutely.

Q. Would not have been deposited? A. No sir, perhaps not.

Q. Then, without the construction of the pier, and the diversion of the river from its old course, would the action of the winds and waves have destroyed that bar at all?

Q. What would have been the effect? A. Well, I think,



from what I know on the subject, that it had about found its limit of increase, and it would have remained there as it was. I do not think it would have increased indefinitely in a long series of years.

Q. Was it probably tending towards an increase, rather than decrease? A. No sir, I do not think so. I do not think it was in a long series of years. Its tendency was to about maintain itself, with occasional variations. You see the wind sometimes drives the dry sand in there, and piles it up into hills. That is seen on the shore north of here when the sand gets very dry. It is blown about and piled up in drifts like snow.

Q. Then the main cause of the destruction of the bar was an artificial one, giving a new direction to the winds and waves? A. I didn't say it gave a new direction to the winds and waves, but I suppose the effect was changed a little. The abrading action of the waves continued after the construction of the pier, and the pier cut off the supply, which would otherwise have maintained that bar to this day—that is what I mean.

MR. LARNED.—I understand you, that this neck of land, in your opinion, would have remained and maintained its position the same as now, but for the construction of this pier? A. Yes sir, no material change.

*Direct examination resumed by MR. JOY.*

Q. Suppose that in the Spring, in a flood, the river had cut across the north end of that bar, what would be the consequence to the bar south of it? A. If it maintained its channel there it would not go away.

Q. If it did not maintain it there, but the water ran out there, and the current kept running down the lake, what would become of the sand-bar south of it? A. Probably drift into shore, and a new one would form outside.

Q. Would not the new river which was formed, acting with the current that was coming down, probably travel down the whole sand-bar? A. It might; that would depend upon the accidental direction it received at the turn. Sometimes up the coast, a single tree, falling in, will stop the current and vary it for a mile. So it is in the Mississippi. We cannot tell, by a general statement of that kind, what would be the effect, without having a map, and seeing as near as possible just how the current would strike the bar. It might, if strong enough, run out so as not to abrade the bar.

Q. The action of the river, by itself would not abrade on the south side? A. Well, it would somewhat.

Q. And gradually wear it down? A. Yes sir, it would if the channel was maintained there.

HORATIO G. LOOMIS called by the defendants, being duly sworn, was examined by Mr. JOY.

Q. I desire to ask you if in 1842 at the bankrupt sale of Henry Moore, you became the purchaser of a mortgage from Henry Moore to Robert A. Kinzie? A. Yes sir, in 1842 or 1843.

MR. McLEAN objected.

MR. JOY said his object was to show abandonment on the part of this man, as well as all the rest of the parties interested in the Kinzie title, he having purchased the mortgage for two dollars and never asserted a claim.

THE COURT sustained the objection, the plaintiffs not claiming title through this party.

WILLIAM JONES called by the defendants, being duly sworn, was examined in chief by Mr. JOY.

Q. Do you know Cyrus H. McCormick? A. Yes sir.

Q. How long have you known him? A. I think about ten years.

Q. Do you recollect whether he was living in Chicago along in 1851, '2, '3, '4, '5? A. I know he was generally living here. He was gone occasionally, but generally here in the city.

Q. Are his works on the north side opposite the depot grounds? A. Yes sir.

Q. Do you own lots there outside of him? A. Yes sir.

Q. Do you know him well? A. Yes sir.

MR. McLEAN.—Is Mr. McCormick a man of good character? A. Yes sir.

MR. JOY offered in evidence a certified copy of a Plat of township 39, in which Chicago was situated, from the General Land Office at Washington, certified by Thomas A. Hendricks, Commissioner of the Land Office.

Also, a certified copy of the Field Notes of the same survey, from the Surveyor General's Office, dated December 18, 1858.



Also, a certified copy of a plat of Fort Dearborn Addition to Chicago, from the Register's Office, dated April 28, 1857.

Also, a certified copy of the map of Talcott's survey, made in February, 1836 ; dated at the Surveyor's office, May 28, 1836, (previously offered by the plaintiff — see page 69.)

MR. JOY also offered in evidence three contracts as follows: Contract between William B. Ogden, and Cyrus H. McCormick and Charles M. Gray, dated Sept. 4, 1847 ; between Charles M. Gray and wife and William B. Ogden, and William E. Jones, dated Oct. 19, 1848 ; between William B. Ogden and Cyrus H. McCormick, dated Feb. 21, 1849.

MR. McLEAN objected to the above contracts. Objection pending.

EDWIN H. SHELDON called by the defendants being duly sworn, was examined by MR. JOY.

Q. Do you know Cyrus H. McCormick? A. Yes sir.

Q. State, if at any time, after this suit was commenced, you had a conversation with Mr. McCormick, relative to this suit, and if so, state what he said.

MR. McLEAN objected.

THE COURT sustained the objection.

MR. JOY requested the Court to note his exception to this ruling.

Q. Do you know when Mr. McCormick went into possession of these lots on the north side where his works are?

A. About the time the contract between Mr. Ogden, and McCormick and Gray bears date.

Q. [Presenting documents.] Look at these contracts and see if you can tell when it was? A. I think it was in the summer or early in the fall of 1847.

Q. Has he continued to occupy them ever since the summer and fall of 1847? A. Yes sir.

The plaintiff's counsel admitted the hand-writing of Mr. McCormick, in the above mentioned documents.

MR. JOY announced that the defendants would rest here. He wished the documents previously offered by him, to which objections had been raised, to be still considered as offered.

JUDGE DRUMMOND intimated an opinion in favor of the admissibility of the contract and deed, between George C. Bates and Cyrus H. McCormick, previously offered, (see

page 80), their effect to be determined by the instructions of the Court.

MR. McLEAN stated that he intended to raise an objection to the defendants deed, from the Secretary of War.

THE COURT, also, decided upon the objection previously raised by Mr. Beckwith, to the certificate of the foreclosure of a Mortgage from Henry King and wife, to Chas. Butler, (see page 72), over-ruling the objection.

The first objection taken by Mr. Beckwith, to the acknowledgement of the deed from Richard Patrick to Cyrus H. McCormick, (see page 72), viz. : the omission of the town or city, was also overruled.

The objection raised by Mr. Beckwith, to the deed of Pritchard, assignee of Henry Moore, to Averill and Armstrong, (see page 2), and subsequently renewed, (see page 70), was also overruled.

Court took a recess until half-past two o'clock.

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#### AFTERNOON SESSION.

MR. LARNED renewed and argued the objection before raised by Mr. McLean, to the three contracts between (1) Gray and Ogden, (2) McCormick and Ogden, (3) Ogden and McCormick and Gray, offered by Mr Joy in the forenoon.

THE COURT took the papers for examination, and reserving its decision.

#### REBUTTING EVIDENCE OF THE PLAINTIFF.

J. D. GRAHAM, called by the plaintiff, being duly sworn, was examined in-chief by MR. McLEAN, and testified as follows :

Q. Colonel Graham, state to the Court and Jury when you came to Chicago, and in what capacity? A. I came in April, 1854—I think the 20th of April, as Superintending Engineer of the Harbor works on Lake Michigan, in the employ of the United States. I relieved Captain Webster of the position he occupied before he resigned. I was ordered here by the War Department of the United States Government, as Superintending Engineer of Harbors on Lake Michigan. That was the limit of my function then. It has since been extended to embrace other lakes.



Q. State what, in your opinion, from your experience and knowledge as a scientific man, has been the effect of the erection of their piers upon the tongue of land, or sand-bar, which formerly jutted out below the south pier? A. You mean the sand spit. We make a difference professionally, between sand-spit and sand-bar. A sand-spit is above water, and a bar is under water.

MR. McLEAN.—We are not very experienced in these things, and have been calling it a sand-bar. A. There is not a doubt in my mind that the protrusion of the United States piers caused the washing away of the sand-spit. It is well known that there is what we call a littoral current—that is, a current abrading the shore, coming from the north and running to the south, which is caused, we believe, by the greater prevalence of the north easterly winds, pressing the waters from the east upon the western shore in such a manner, that they strike it at an angle of about forty-five degrees, causing the water to run in a southerly direction along the coast, in an habitual current, that never ceases, as far as my experience goes, unless checked by some obstacle, as a temporary wind blowing in the reverse direction. Then its velocity is retarded by this temporary reverse influence. This current, abrading the sandy shore of the lake, will, of course, carry away a portion of the material composing the shore, which is a light sandy material that we call silt. This silt, being held in suspension, by a well known law, that what is held in mechanical suspension in a current will be precipitated by the slackening of that current, is deposited wherever the current is retarded. And my belief has always been, that this sand-bar has been caused by the constant check which the silt held in suspension, and carried by this littoral current, receives at the end of the pier. The current being checked there, the silt is deposited, and forms this sand bar. I refer to the extremity of the present north pier; there the water first received its check, and I believe that bar is formed by the deposit of that which was held in suspension by the littoral current, and would have been carried further on but for the checking of this current. I am speaking now of the bar under water, I call the other a sand-spit, if you will please to allow me to do so.

Q. Let me draw your attention to the spit? A. The destruction of the spit, was I think, owing to this cause. There is a strong current on this shore, which is deflected

by the end of the north pier, so it will have an increased velocity by what we call the impact, or pressure of the waters. It is similar to a river flowing at a certain velocity; if the bed is contracted the velocity is increased, although there is a free way here to the east, yet, if the water is resisted, it increases the velocity at that point. I know in fact that this is the case, for I have made many surveys of that bar. This produces a counter current in particular winds.

Q. What winds? A. A southerly wind or an easterly wind will cause that current to deflect, and cause a counter current that would abrade the western shore below the mouth of the river, or south of it. Again, as soon as the erection of the piers was carried out, every southerly or southeasterly wind coming against that part of the shore, it is penned up in a sort of *cul de sac*, and as no outlet is afforded, it would abrade the shore, more in my opinion than if the piers were not there.

Q. In what kind of weather would this abrasion take place most rapidly? A. My opinion is this—and I believe it is different from that of some engineers—my belief is, the formation of the bar is emphatically due to this littoral current, and although this littoral current has far less force than some opposing winds would create, yet, the winds that would cause an exception are so few in proportion, in the course of a year, that the more slow, but steady, and constant action of nature is triumphant, and keeps the bar there in spite of all the easterly gales that blow here. That is my own belief based upon my information, and I have given a good deal of attention to it, having made eight or ten surveys here. This habitual littoral current being the prevailing force, although not the strongest, while the winds last; yet it is of such constant duration, that the counter current consequent upon its action would have washed away and abraded the shore below, even without storms. I have seen that illustrated in other cases than this. It is a fact, that we hardly ever erect piers similar to this, that the shore to leeward, as we call it—that is, in the direction opposite to the wind—is not abraded. It is so at Milwaukee. [Taking Map “G., No. 52”]. I recognize this to be a map of Chicago Harbor and bar, dated April 18, 1857. This is my map. There is a still more recent one, made in 1858, very similar to this. Here we have the bar delineated, as I wish to explain. When I



came here in 1854, one of my first operations was to dredge the bar away. I have a map which will show the shape of the bar when I came. We cut a channel of twelve feet depth, and about a hundred yards wide, through this part through which heavy vessels could pass; but this habitual current, of which I have spoken, filled it up by the next year. To keep the channel open here, requires constant dredging. A dredge may be kept at work here as regular as the current runs—every day in the year. It is very easy, at a small expense, to keep it down, because we can dredge it away faster than the current deposits it.

Q. How was that bar—that sand-spit—originally created, in your judgment? A. That is an opinion upon a geological point. I have no doubt, myself, that it was created originally—how far back, it would be very difficult to speculate upon—by this same cause; that is, by the silt wafted by the littoral current and meeting the river. There is, then, a composition of forces, and the bar takes a direction diagonal to these two forces. The exact direction of that diagonal depends on the relation of the two forces. The diagonal will conform to that force which is the stronger, rather than to the weaker one. The littoral current here was generally the stronger, and was habitual; therefore the bar took that direction.

MR. WILLS examines.—Then the forces going to form the sand-bar at the end of the pier now, are the same causes which originally created the sand-spit? A. I think so. I have so stated in all my official reports discussing the question. Here we have a formation parallel to the old one, produced by the same original causes.

Q. State how far that sand-bar, existing and caused by existing forces, stretches down—to what point? A. About half way between Washington and Madison streets was where it was in 1857—perhaps not quite half way. It is a little lower, I think now. I have a map a year later.

Q. The general direction of that bar under water is south east, is it? A. It is nearly so. That would be nearly the general direction. I must guess at it here, as I have not the map before me. I think it is south  $12^{\circ}$  or  $15^{\circ}$  east.

Q. Parallel with the shore? A. Yes, I never made a measurement to see whether it was parallel with the shore, but the map shows that. You see the shore opposite is ar-

tificial now. It is not the old shore, but the break-water.

Q. Suppose a spit of land such as is designated there on that map [presenting a map] to have existed prior to the construction of the Government pier ; that subsequently this spit of land is found to have disappeared, or become submerged ; I ask you to state, as a scientific man, whether the erection of that pier was the producing cause of the destruction of the sand-spit ? A. I have always thought so. I have always expressed that belief. I have not a doubt of it.

Q. In the absence of that pier, what would have been the condition of that sand-spit ? A. We find in similar cases that these sand-spits increase with time. The cause that produces them is constantly adding to them, and probably that would have increased. In Milwaukee we found it so ; until the year 1857, I think it was, the lake being two feet higher than before, the water encroached, narrowing the sand-spit so encroached upon.

Q. Explain the tendency of the pier in causing the destruction of the sand-spit. A. I thought I had just done that. The pier projecting into the lake and the littoral current being compelled to turn that point, it will turn it with a greater velocity than had existed before. Every current must produce a counter current. I think, the pier projecting out here, the current passed with increased velocity, and produced a counter current coming around on this shore.

Q. Where would it begin to operate ? A. South of the mouth of the river, it would operate on everything that came on its way. This sand would come in its way, and so would the shore. Moreover, the southern waves being penned up by the winds and checked here—not having an opportunity, as we say, to evolve or expand themselves in every direction, but being checked here, must go against the shore to develop themselves. A wave will develop itself in every direction around the whole circle. Here it is checked, and therefore—

Q. Therefore, the sand-spit must go ? A. Yes. There are cases where storms will destroy a bar ; but in every such case that has come under my knowledge, it will reform again very quickly—that is according to the quantity of deposit.

Q. Would this effect to destroy the bar be greater or less



in stormy weather? A. It would be greater certainly. The pier would tend to destroy the spit inside of it, in an easterly wind to a greater degree than without it; because it prevents the wind from developing itself in another direction. About half the whole circle is cut off, and it can develop itself in only 180 degrees instead of 360 degrees.

Q. What effect would the diversion of the original channel of the river have upon the destruction of the spit—putting a dam in there, closing that mouth, and making a new one here, forcing the river to discharge itself in an easterly direction? A. It would cut off the supply that formed and kept up the sand-spit, undoubtedly. It would cut off the supply brought down by this littoral current.

Q. State, as far as you can, in a general way, without mathematical accuracy, the amount of money it would have taken, to have put a barrier, or breakwater, on the east shore of that spit, to protect it from the action of the sea.

MR. JOY objected.

JUDGE DRUMMOND said it was a collateral matter, but the witness might state it in general terms, and briefly.

WITNESS.—My answer is this—as an engineer, I am always reluctant to give an estimate, unless it is based on an examination. I have made no examination here, and I do not know the condition of the bar at that time. It would be mere guess work on my part. The bar was how long?

MR. MCLEAN.—About half a mile. A. If it were half a mile, the cheapest way of protecting it would be to drive close piles—say a foot square; and then it would depend upon the price of timber at that time, and I am ignorant of that. It would take—say 2,500 piles. They ought to be driven into the edge of that bar, to insure a protection, at least fifteen feet, because we know they would otherwise come over, or trip. I do not know what was the price of timber then. Such a row of piles, to make them secure, would have to have other piles inside of them.

Q. Do you suppose it would cost more than ten thousand dollars? A. I could give no specific opinion on that point. No engineer could give an opinion, without data.

Q. Mr. Shepley says that piles would cost from a dollar and a half to two dollars apiece. A. Then how much would it cost to drive them? I do not feel competent to answer that question at all.

Q. [Presenting a document] I believe this is a report of yours? A. Yes sir.

Q. Have you recently made an estimate of the cost of protecting ground similar to this spit, at Milwaukee? A. I made an estimate for Milwaukee, of the cost of stopping some breaches there. The sea has really made inroads there, and cut through and invaded a most valuable roadstead. This is my estimate, but I would have to look over it, before I would recollect its contents particularly. We study these things in our closets; and I have thirty-five harbors to look after. This is an estimate for repairing the old pier. My report on that point is this—

JUDGE DRUMMOND.—I don't think that is competent.

Q. State in round numbers what such a breakwater would cost. A. I cannot tell; it all depends upon circumstances. What will protect the shore in one spot may be very insufficient five miles off. I cannot give an opinion there at all.

Q. Are the facts stated in this Report correct? A. I believed them so at the time, or I should not have made it. I would not say they are correct, for I have no doubt I made a great many mistakes, as everybody else does.

*Cross-examined by Mr. Joy.*

Q. You have spoken of the current passing down the shore of Lake Michigan. How rapid is that current? A. It varies with the winds. I do not think it is often more rapid than two a half miles an hour.

Q. During the summer months, when it is calm, is it fast enough to deposit sands off the harbor? Yes sir, unquestionably. I don't suppose there is a day in the year—unless this current is checked by a counter wind, that there is not considerable sand deposited. Now, I will explain myself. I can make an estimate in this way: We can easily dredge faster than the deposit; and we take up, in an ordinary day, from six to eight hundred cubic yards; and I have taken up 26,000 cubic yards in one year on that bar. Yet, by the succeeding spring, that very channel, which had been twelve or fourteen feet deep, will contain not more than from seven to eight feet of water; so that you can see there must be a continual deposit. When the wind backs the current, a greater deposit is made.

Q. What is the direction of that sand-bar? A. It is about south,  $12^{\circ}$  or  $15^{\circ}$  east; I can't tell exactly now.



Here is the angle shown on the map. I judge it is about  $15^{\circ}$  east of south. I judge only by throwing my eye on the meridian line and the bar. It is the general current along the shore strikes here and follows down. If this pier was not here, it would follow the line of the shore. That bar, as I have fully explained in my reports on two occasions, is formed in this way: [To Mr. Joy]—Your Company erected works here in advance of the shore, and the south winds, striking this pier, deflected the current, and that caused the sands to be deposited as it appears here [illustrating by the map]. I have stated in my reports that this is forming by the erection of the pier of the I. C. R. R. Co., and I have recommended an appropriation to move that away [showing the point].

Q. Is that a large deposit? A. No sir. The figures are here. Where it is 12 feet water, we call it "no bar." Here it is marked—12 11-100, 11 11-100, 11 5-100, etc. The map shows for itself.

Q. Do you recollect when the I. C. R. R. Co. built their breakwater? A. No sir; that was before I came here.

Q. Has that bar been depositing ever since then? A. I have no doubt of it.

Q. Suppose that breakwater had not been there, would not that sand-bar have been thrown in shore, into the corner? A. Oh yes, but not with so much violence, for the reason that the force of a reflected wave depends on the depth of the water. The wind from below here would affect it. It is reversed in that way [pointing out the localities on the map]. My opinion is, that the bar was destroyed by the force of this current in here, and the material, passing it, would be thrown further to leeward. It is probable this bar will grow to leeward.

Q. What is the general form of which the current strikes the shore here? A. We think the prevailing winds here are the northeast winds. You see in all this hydraulic matter, it is not by fixed rules that we can always calculate, as a man does who lays out an edifice; but we must take into consideration all the circumstances. Hydraulics is by far the most difficult branch of this kind of military science. It is far less difficult to fortify any city in the world, than to solve perfectly one of these hydraulic problems. We are bound to consider all the existing causes and influences. It is more difficult to tell how the channel of the Ohio river should be protected, or how its waters would be

affected at one of its bends, than to fortify the most difficult place in creation. It requires previous thorough examinations and a wide basis of facts before you can make your deductions. Here the fact is, that the prevalent wind is from the northeast. It comes with a greater momentum from the northeast, than any other direction, and that causes this littoral current. First, it produces a current from the northeast, but when this current strikes the shore, it is deflected to a direction nearly parallel with the shore, producing bars, generally parallel with the shore.

Q. Is not the whole of this western coast of Lake Michigan wearing off? A. It is wearing off in some places, and forming in others. That depends on the contour of the shore. There are places, too, where it cannot be abraded; and there are places where the current is checked, and deposits are formed.

Q. The general angle at which it strikes the shore being in about that direction, so that blowing down on the north side, when that pier is built out there, leaving the waves to strike in that way [illustrating with a map] would not the result be to protect the sand-bar immediately south of the pier, and wear it away a little further down? A. I don't think, in your proposition, you state the case as it exists. I do not confine myself to the immediate locality of the pier in discussing this question. It begins far north of here, at the head of the lake, or at Milwaukee.

Q. But I am speaking of the winds? A. But the current is the fruit of the winds; so far as this littoral current is concerned it is produced by the habitual winds.

Q. But what would be the effect of the waves? A. The effect of the waves from the east would be to abrade the shore, and it is an affect that this map shows. It is a fact which can be fully illustrated from our surveys, that unless the gale is very severe, it does not encroach on the shore, and when it is done, nature very soon mends the evil. For instance, the lake shore is laid down here every year on this map. Here is the shore in 1837. This is on the north side of the pier. Here again it grows out rapidly in 1839. Here it comes in until '58, varying with each year. In '58, there is a portion more inward than in '55, but it did not long remain so.

Q. Do you mean to say that where the shore is wearing off all along here, what one storm wears away, another



makes up? A. No sir. I don't think it is a fact that the shore is wearing off for a hundred miles along here. I should suppose not. I may say that my duties have not brought me particularly to the examination of that question. It is probable some points are wearing away, and some points are not.

Q. But the general current drives at an angle of about forty-five degrees from the line of the shore? A. Yes sir.

Q. The effect is to wear away at certain points, and deposit below? A. Taking the earth from above, and depositing it below along the lake.

Q. Where do the sands piled up at the south end of this lake come from? A. From the north, I think.

Q. From the northwest coast? A. Yes sir.

Q. And come around, and are deposited down here. A. Yes sir, I suppose so.

Q. And piled up in hills? A. No sir. I am not aware of that sand under water is not probably piled in hills.

Q. But on shore? A. Yes sir, it would be blown up by the wind. A good deal of sand is carried by every wave, in a strong gale of wind, that breaks on the pier, and the sand is precipitated into the channel.

Q. Suppose you did not dredge there, and let the current alone, what would be the result? A. I suppose a bar would come above water. I have no doubt in process of time, a bar similar to this old one would come up.

Q. Composed entirely of sand? A. Yes sir, of the silt; the silt is sand, in this case.

Q. Suppose, after that bar has formed, and come above water, the current could be stopped some distance north of it, and the waves continued to act, would it not wear away? A. Yes sir, if you stop the supply.

Q. Was it not as much by stopping the supply to the old sand-spit, that it wore away, as from any other cause?

A. This bar was destroyed long before I came here; I was not a spectator of its destruction; I was not personally acquainted with the facts, which those living here might have known; but I have no doubt that the current would have swept it away.

Q. But suppose the sand had continued to come down, and be deposited on the lake shore, from the north to the old spit, would it have worn away? If the littoral current,

carrying the silt, had not been carried out into the lake, instead of depositing the sand on the old sand-spit, would it have been destroyed? A. I think it might have gone away; that is a point I have not thought of much; but I think it would have gone away. I think the creation of the pier undoubtedly, in every aspect in which you can view it, was the cause.

Q. Stopping the supply, as you argue, the waves not having their effect mended, would have worn it away? A. I have no doubt of it.

Mr. LARNED.—Do you say that when heavy storms are acting below here, nature replaces their effect? Yes sir.

Mr. LARNED.—Suppose after this pier was built, and the natural working of this force bringing the supply was stopped, a very severe gale had swept away this sand-spit, would it have likely been replaced? A. I don't know—I do not see any law that could possibly replace that sand-spit. I think that is a very clear and easy problem. I do not see where any sand could have come from to replace it.

Mr. JOY resumes.—You spoke of the effect of winds and currents gradually increasing that sand-bar: how long do you suppose that sand-spit had been forming? A. That is another geological question. It may have been centuries and centuries ago. I would not give an opinion. Perhaps about as long as it took to accumulate the formation into the Gulf of Mexico, at the mouth of the Mississippi river—that is, in proportion to the two streams. It might have been before the Christian era.

Q. If the action of the waves had not been to wear it away, as well as add to it, how large would it have become? A. I think its size would have been limited by another law. It would probably have rested at a certain period. That is a geological speculation. But it is a fact as to dredging, I have twice destroyed this bar—in '54 and in '56. I believe I have as many as eight maps of this bar, made for the purpose of solving a question before the Light-House Board, in regard to putting a light house there. And the conclusion was, that the bar reformed itself identically the same, or only differing in slight variations in its sinuosities of outline. It is generally identically the same. I will go on to answer you now. After the bar has re-asserted itself, up to a certain limit, it does not appear to increase, or if it does, it is very slowly. The effect of the law of nature



seems to have reached its acme, and I apprehend that it will be a long time before this bar extends itself much further south ; for the reason that the force which throws it down grows weaker as it recedes from the pier. The current widens there, and in proportion as it widens, it is diminished in strength. The deposit is lighter as you go further down.

Q. Don't you suppose the old sand bar had been at work long enough to get its maximum ? A. Not being acquainted with the force of the current, I do not know ; but I think that bar was growing, from the fact that the Milwaukee bar was growing, until the piers were put in. I am well acquainted with cases on the Gulf of Mexico where the bar continues to grow ; sometimes indeed they form, and join the shore almost—it becomes a shoal. Where there were passages, and vessels could come in, as on the coast of Georgia, it is found very difficult to get in and out.

Q. Was the pier at Milwaukee at the lower part of the sand spit ? A. Yes sir ; the pier at Milwaukee was in prolongation of the mouth of the river, as it was naturally. I cannot tell so well about the first pier there. I once had all the public documents on that subject. But in 1844, when I was in Mexico, my library was burned, and every scrap of paper consumed, and since I got back, I have not had sufficient access to my predecessor's papers, to tell.

Q. There are breaches in the pier at Milwaukee ? A. Yes sir.

Q. What made them ? A. I do not think that spit would have been breached at all, but for the high water on the lake, for the last two years. It has been at least two feet higher than when I came here, and the water of course encroached by its increased depth beyond its former bank, then the waves coming up, attacked a more vulnerable sand. It affected it easier than the damp sand at the old shore, which was compacted by the water. My report says they are two or three hundred feet wide.

Q. You stopped them by crib-work ? A. No sir, the government did not give the means, and it was not done. There was a roadstead inside of it, that was wide and deep, which Milwaukee will miss very much, for a lower roadstead. That was what I wanted to preserve. They have made a new harbor further north, similar to this one here. They

have carried out what they call the straight cut, carrying the river straight out into the lake.

J. B. F. RUSSELL recalled by the plaintiff, examined by Mr. McLean.

Q. How long have you been here in Chicago? A. I came here in July, 1832.

Q. You were familiar with the appearance of this sand-spit? A. Yes.

Q. Have you any knowledge of the manner in which that sand-spit disappeared, and if so, state? A. That sand-bar gradually was washed away from 1835 through 1836 and 1837.

Q. State what you mean by "gradually." A. I mean it was larger in May, 1835, when I came here to live, than the next year.

Q. How was it diminished in the meantime—by every storm? A. It was, by every severe blow.

Q. Perceptibly? A. Yes, it was a gradual falling off that would not be observed. It was a gradual lessening, that would not be seen, except it would be a storm.

Q. Did it continue to disappear in this way, storm by storm? A. It lessened very much from May, 1835, to the fall of 1836, according to my recollection.

Q. In storms? A. In storms.

Q. How in calm weather? A. I suppose it diminished them also, but was so perceptible.

Q. How in 1836? Do you remember a violent storm in Oct., 1836? A. Yes sir, I well recollect it.

Q. Describe its effect on the sand-bar? A. In 1836, in Oct. or Nov., there was a very violent storm, which brought, I think, three vessels ashore, or very near the shore. They grounded. I recollect it on this occasion from there having been on board Rev. Mr. Blatchford, who was sent here as a minister. It was some 150 or 200 yards from the shore. I recollect on that occasion the sand-bar went off very much more than I ever knew it to do before.

Q. Where was this vessel lying? A. I think about 150 or 200 yards from the shore. It was a very considerable distance—perhaps 150 yards outside the sand-bar, where they grounded.

Q. I understand you to say the sand-bar was very perceptibly diminished by that storm? A. By that storm.



Q. Were any houses upon the sand-bar at that time—balloon shanties? A. I think not, sir; I don't recollect them—not in 1836.

Q. What was the condition of the sand-bar as to quantity after that storm? A. It very rapidly diminished.

Q. Was it from the placid action of the lake or storms? A. From the storms and the gradual natural diminishing of a sand-bar which is on the leeward side of any obstacle to the current. It diminishes from natural causes.

Q. State, from your personal observation, whether that sand-bar disappeared perceptibly and visibly, from storms, during the whole time you were here, until it was finally submerged? A. Yes sir; I have no doubt of it—storms and the natural diminution of it by causes, such as throwing out obstacles—the construction of that pier.

Q. What effect had the construction of that pier on this bar? A. It had the effect of washing it away.

Q. Describe how it had that effect. A. Well, I could not go into a very minute description. I know any obstacle thrown out from the lake shore will produce an increase on the north side, and a diminution on the south side; that I know from my own experiments.

Q. You used the word “gradually.” Now I want to know whether you apply that word “gradually” to the time it took or to the very act—the manner. A. Gradually—I mean that I didn't observe it. I had no connection with the bar that would give me a very minute acquaintance—that would cause any very minute attention. I know very well, the effect of a storm did diminish it—in what proportion, I would not express an opinion. Every storm that came would wash it away.

Q. Visibly? A. Visibly.

Q. Then I understand you use the word “gradually” because it took from 1835, when you came here, to 1836 and '37, when it disappeared? A. Yes sir.

Q. When did the balance of it disappear after that large portion in 1836? A. The greatest amount of that bar went away in 1836.

Q. In that storm? A. In that storm up to 1837, there was a considerable rise in that bar up near the south side of the south pier, and it was quite elevated then. The waves did not affect it, but what year it all went away I have no recollection.

Q. Look at that [presenting Allen's map of 1837]?

A. Yes, that is what I speak of. There were several years I recollect, it was very high just at the south pier—almost up to it—so that you could step very easily from that to the south pier. Here that was, [pointing]. I don't recollect when all this was washed away. I only recollect until the improvements had gone on and the south pier been built and then a portion of it was still left.

Q. That did not receive the action of the storms? A. Yes sir, this high part near the pier.

Q. You can't fix accurately the date when it all disappeared? A. No sir.

*Cross examined by MR. JOY.*

Q. You state that the bar went away gradually; do I understand you to say you saw any mass of it go away at any one time? A. Not in one moment, I only recollect that a day or two after a storm, I thought from perceiving it, without any particular examination, that it had washed away about the distance of sixty feet.

Q. What storm was that? In 1836.

Q. It washed it away towards the lower end? A. Yes sir, toward the lower end.

Q. You thought it might have washed off in a storm? A. Yes.

Q. How long was that storm? I think it lasted two or three days.

Q. In the course of that, sixty feet of the lower end disappeared? A. Yes sir, it was thrown off by the waves or scattered by the water.

Q. The rest of it remained then? A. Yes.

Q. How high was it above water? A. There it ran very near the surface of the water. It became higher as you approached the south pier.

Q. You came here in May, '35, you don't know how much it diminished after 1833 to 1835. A. No sir.

Q. More after 1835 to '36? A. No sir, I never measured it. I only measured it by my eye.

Q. That is what you mean by its visible disappearance? A. Yes sir.

Q. You have been asked if it didn't disappear storm by storm, and you spoke of other causes. Do you not mean from every wind? A. Every strong wind.



Q. Would not every wave wash it away? A. Yes sir, it undoubtedly would.

Q. So that it was gradually going, and along from time to time you could perceive that it had diminished? A. Yes sir, that is what I mean.

Q. Do you recollect when it was all gone? A. No sir, I can't bring my mind to any recollection of it.

Q. Do you recollect any time when you could see it was all gone? A. No sir, I don't know that it is all gone now.

*Direct examination resumed by MR. McLEAN.*

Q. You spoke of different winds having an effect upon it? A. Every gale of wind affected it and a great deal more than this silent, natural washing away.

Q. What would be the effect of different winds? A. The north-east wind would affect it a great deal more.

Q. What would be the effect of a wind off shore? A. Well, I don't know that it would have any effect. It is not such an effect as the other, for it can only come from the lake shore, or south below where it curves. It could not have the effect of a wind coming from the north end of the lake.

Q. It would dash the sands off from the bar. A. Yes.

Q. And cause more to go away? A. Yes.

Q. Coming from the opposite direction, they would dash on shore? A. Yes sir.

R. C. BRISTOL, called by the plaintiff, being duly sworn was examined in chief by MR. McLEAN, and testified as follows:

Q. Captain Bristol, how long have you been here in Chicago? A. I first came here in June or May, 1832.

Q. What was your business at that time? A. At that time, I was sailing a vessel on the lake.

Q. Do you know how this sand-bar was destroyed? A. Well, I have satisfied myself, from observation from time to time, that it was caused by the erection of the piers.

Q. Have you any personal knowledge of the manner in which it was destroyed—whether by storms or calm water? A. Well, I don't know that I have ever seen at any time, any great quantity of it going off.

Q. Have you seen it before and after storms? A. Yes sir, and I have seen a visible effect.

Q. Visible diminution of it? A. Yes.

Q. Did you see that storm of 1836? A. No sir, I was not here at the time, but I came soon after, and I saw the difference between the times, I was then sailing a steamboat. I saw it had materially changed.

Q. How long a time was that? A. I think our trips were then made in twenty one days.

Q. Then in twenty-one days you could see a visible change in the appearance of the bar? A. Yes.

Q. You were Captain of one of the line of steamboats? A. Yes.

Q. How long have you been sailing on the lakes? A. I commenced in the spring of 1832, and sailed until the spring of 1838.

Q. Was your attention called to this bar, &c.? A. Yes.

Q. And this matter of diminution particularly? A. Yes.

Q. You landed at the mouth of the river? A. Yes.

Q. How did you get in? A. When I first came here, I came with a sail vessel, and used a boat to come into the river, and sometimes with a loaded boat it would be difficult to get her over, and the crew would have to push her through the sand. After coming over the bar, it was deep water. We would very soon find it more than the depth of an oar. We couldn't pole them and had to row.

Q. How long were the oars? A. Sixteen feet.

Q. How deep was the water there? A. Probably twelve or fourteen feet. The bar was a connection between the shore and what was the outer bar all along here. That flattened down and we came over that and then we came into deep water.

Q. Into the old channel of the river? A. Yes.

Q. The bar filling up the end of it? A. Yes.

Q. Where was that mouth located? A. I should think at Madison street, or a little south of that if I was going to say different from that.

Q. What has been the effect of the construction of these piers upon this sand-bar? A. Well sir, I was here most of the season of 1838, acting as agent for the line of steamboats. I had sailed forthem previously, and we of course, were interested in knowing about the water on the bar. It was the spring of 1837, I came here in a steamboat, the largest on the lake, named the "Madison." That year we got in generally pretty well; but after a little while it was



found there was a bar forming at the end of the pier, as it then existed, that was in 1837. That did not really come to be in the way until 1838, but it soon got so that boats had to go around.

Q. You are speaking of the bar under water. I am referring to the destruction of the sand-spit—the tongue of land; I want to know about that. A. Very soon after the construction of the pier, that began to go away. In 1839, perhaps, my attention was called to it more particularly, being interested in the property of the Reservation on the shore. I represented an interest. Also, in regard to the depth of water on the bar, I was interested; and I found from year to year, as the pier went out, the greater action of that washing. It washed up towards the pier, and undermined the bank more generally, as it got nearer the south pier. While the pier remained stationary, and no extension was made, the bar seemed to remain as it was. Soon after Capt. McLelland came here and took charge of the public works, I called his attention to the action that had been going on, and he then began to take notice of it, and became satisfied that that was the cause—that the observations I had made were correct; and I asked him if there couldn't be anything done about it—if there was no way of reaching the Department so as to arrest the progress of the piers.

Mr. Joy.—Are you speaking of the main shore? A. The main shore and the bar also were washing away; every extension of the pier would wash away the old one.

Q. And you were interested in stopping that—interested in some lots? A. Yes sir, and in preserving the greatest depth of the water at the mouth, on the bar, for I was steamboating. Captain McLelland said he was in a position then that he could not say anything about it; but if I would get up a letter, with a few signatures here, having the same view I had, he would forward it to the Department, and get an action upon that, and that he would finally make a report. I suggested to him the stopping the sand above—building a cheap pier out, and arresting the sand from this action; it could be very easily tested, and a pier erected like that, that would just keep away the sand, and keep that open for us, without any further erection of expensive piers. He fell in with it, and I think did recommend it to the Department, but nothing was ever done. Col. Abert was here himself, and I went to him about it, and—

Q. Then you attribute the destruction of the bar to the erection of the piers? A. Entirely.

Q. Do you believe there would have been any destruction if they had not been built? A. I believe it would have remained as it was, or it would have accumulated. I think there would have been some accretion.

*Cross-examined by MR. JOY.*

Q. When you say the pier caused the bar to disappear, you don't mean the piers carried the bar away? A. No sir, I mean the area of the pier going out, forming an acute angle, and the water going in from the eastward, with a heavy northeast wind with a sea rolling had a very serious effect, and the wind from the east and southeast had pretty near as much effect as the northeast wind.

Q. Then you mean simply that by the piers being built out the sand went away, and if the piers had not been built the sand would remain? A. Yes sir.

Q. You never saw any great quantity of that go away at once? A. No sir.

Q. It went away gradually, through a period of several years? A. I say I had noticed from time to time that after a gale of wind there was a very perceptible difference from the appearance of the day previous.

Q. Did it diminish in height? A. It diminished in height and diminished in length as it grew up towards the pier.

Q. The sea would break over it in storms? A. The sea would break over the lower portions, not up by the pier. In the original position of it the sea very rarely broke over it. The outer bar protected it, and the sea would not roll over it, but along it.

Q. Don't the waters of this lake rise very high when the winds blow from the north? A. Just previous to setting in a gale from the north, the waters rise considerably, but in the early part, the water recedes, and during the greatest height of the gale the water is not as high as in the commencement.

Q. In such cases haven't you seen the water break clear over? A. No sir, never. Understand me—not in the original position, nor as I know, since it has been disturbed. Not as it was at first.

Q. Didn't the waters break over so as to wear away the main coast? A. No sir.



Q. How came you to petition the government to protect the coast? A. That was after the piers were built.

Q. But the bar was there? A. No sir, not to the extent it originally was.

Q. How much was it diminished? A. Perhaps half way up—perhaps more.

Q. What time was that application to the government? A. I have not the date of it.

MR WILLS.—It's 1840. A. No sir, not the one I speak of; that was '42 or '43, along after a portion of this disappeared.

Q. Was much left in '42? A. Yes sir, there was considerable left of it in '42. Up towards the pier, my recollection is, it never entirely washed away. My recollection is there was a little.

Q. Do you remember when they excavated for the harbor, they threw sand right over the south pier? A. Yes sir, all along they threw it over.

Q. They threw it over so that it was higher? A. Yes sir, and some they had to boat away around.

Q. When you speak of that bar having become visibly less and less, it was after a storm of some duration? A. Yes sir.

Q. How would slight winds and waves affect it? A. My impression is that before the piers were built—

Q. Since the piers were built? A. I don't think they would affect it at all. I was going to tell the reason. The general tendency of surf running along shore is not to go upon it at all; the water is retarded; the most of the swell is ahead, and it leaves it rolling along with it, and laying on it something like a furrow turned over by a plough,—just as it does along shore. If they are first broken outside, it gets so much diminished that the action of the water in moderate weather is not to wash anything away.

Q. Then that surf coming on that, did not move the particles of sand? A. It does to some extent, but you will find that the sand on the shore is wet, and hard, and unmoved, and immovable in moderate weather, so that men can travel on it without making an impression.

Q. Do you mean when the surf rolls along in moderate weather, it don't move at all? A. No sir, not in moderate weather, but I say, when the swell increases and the surf comes up to the drier particles, it moves them.

Q. Do you think a wave could come up a foot and break, without moving a particle? A. You will find the coarser particles—the gravel rolling up, and back, but not the sand.

Q. Would it not move at all? A. No sir.

Q. Not a bit? A. No sir, I mean not perceptibly, you see particles move back and forth with the little waves, but I mean to say, that the main prominent part don't move at all. It's just as hard as can be—there are loose, coarse portions such as gravel, from about the size of a hickory-nut to the size of a pea, will roll up and back. They may pass along, and others pass along and take their place.

Q. Don't they sink down into deeper water? A. No sir, they work up.

Q. And the finer ones work down? A. Yes sir.

Q. How high was that bar when you came here? A. Well I should think opposite where the piers crossed it, five feet, or not more than four feet, diminishing as it went down to perhaps not more than three and a half feet.

Q. You say you went away in 1836, and was away twenty days? A. Probably twenty-one days. We took about twenty-one days for a trip.

Q. Your recollection is it was diminished perceptibly in twenty-one days? A. Yes, very perceptibly.

Q. How much was left? A. Pretty much of it was up towards the pier. I should think there was several hundred feet gone at the lower end, that is, sunk below the waters.

Q. Did you ever go down to see how far it went under water? A. No sir.

Q. You were a captain of a steamboat? A. Yes sir.

Q. Taking long trips with a large boat to Buffalo? A. Yes sir.

*Direct Examination resumed by MR. McLEAN.*

Q. How long were you a captain of a steamboat navigating the lake? A. I commenced it in 1832, and kept it up to 1838.

MR. LARNED.—Is there not all along shore here, a line of light gravel and little stones, which is a short distance from the edge of the water, and below it a strip of solid, compact sand? A. Yes, in the ordinary stages of water there is.

Q. And is it not very good walking on that sand? A. Yes sir.



Q. Is it not a good road for horses? A. Yes, it used to be the case, when the roads were poor, that we used to take the edge of the lake, sometimes, in driving down to Michigan City, after a storm.

MR MCLEAN.—Do you remember about these coffins? A. Yes sir, when I first came here, they were there, and in 1833.

Q. Where? A. My impression is they were not very far from the foot of Water street, perhaps between there and Lake street, somewhere along there.

Q. State what you know in regard to the means of their appearance, and how early they appeared? A. When I first came here, in 1832, I saw them, and I saw them again in 1833. They were still sticking a little further in 1833, and more and more to be seen of them, and I began to look for the cause, and I found there was a drainage of what was the quicksand over the bed of clay that underlies all that portion of the city, just above water line. The quicksand was working out slowly, and all along the beach had the indications of running out, and undermining; and that was the cause, undoubtedly the cause of the caving in of the bank until these piers were built. You see there is no drainage for all this Reserve; it was all level of a sandy porous nature, and just above the water a clay comes, and there is a quicksand there, and any man who digs down will find it, and the water runs down into it of course, but when the quicksand ran out down there, there was no foundation, and it caved in, and the coast showed all along the river this way. There were two or three portions along there from Dock street; I believe it was just between there and where the old light stood.

Q. Then this exposure of coffins had no connection with storms? A. No sir, not at all. I have no idea the lake passed over. It might have sometime passed over; but it never passed over in the knowledge of any of us here to touch the bank there at all. I have the impression of it in the summer of 1833. I came here in a new vessel. I had an interest in it, and all I had in the world was in her; and I had discharged my cargo through the mouth of the river, and the boat came off for sand for ballast, and we came in there—I and the mate and one other man; and while we were there it came on about as hard a storm as ever I see;

and I was on the bank watching for the vessel to come ashore.

Q. How high did the waves dash in that gale? A. Only over the lower portions. That was one of the most violent gales I have known.

Q. That was before the piers were built? A. Yes sir, in 1833.

Q. Are you one of the old steamboat captains here?—are you thoroughly and perfectly acquainted with it? I want the jury to know your experience. A. Well, I had sailed all my lifetime, up to 1838. I came here in 1832. I was all my life at sea, from the time I was a boy to be aboard a vessel at all.

Q. Then your deductions are based upon thorough practical knowledge and long experience? A. Well, I don't know that it is worth while to answer in the affirmative, when you put it in such strong terms as that. I had been at sea. I come here a practical sailor from the ocean. I came over from New York here in the Spring of 1832, and I was between Detroit and here in '32, '33, '34, '35, '36, and '37; and between '36 and '37 I was between Buffalo and here, and in '38 I stopped ashore here to manage the general matters for the line of boats, and I never was sailing since.

MR. STUART.—That is Wright's line of boats? A. Yes sir.

MR. HOYNE.—The first line established? A. Yes sir.

MR. LARNED.—Were you particularly interested to make careful and accurate observation of that whole shore? A. Yes sir, I took a great interest in the whole matter.

MR. MCLEAN.—Do you know anything of a vessel going ashore on that bar in a storm of 1836? A. No sir.

MR. WILLS. [Presenting a map.] When you speak of a portion of the bar remaining under the south pier in 1842, do you refer to this strip of sand in the corner here? A. That, I think, come out in connection, and left a point down in this way.

Q. Then it is a part of the property with the green line there? A. Yes sir, I think it came down here. I think that is longer than it showed later. [Greely map, No 1.]

MR. JOY.—How late did it show? A. I think there was a portion of it, probably, up to the time the Illinois Central Company took possession.



Q. How late did you see it? A. I cannot, perhaps state the year. I think, perhaps since 1850.

MORGAN SHEPLEY, re-called by the plaintiffs, was re-examined in chief by MR. MCLEAN, as follows:

Q. Do you know anything about the destruction of the sand-bar? State your means of knowledge. A. I came here on the 27th or 28th of June, 1833. We commenced of work on the south side right opposite the garrison. I helped to put in all the work of both piers, except 90 feet of the north pier.

Q. What period of time was that? A. That was from 1833 up, until under Capt. Webster.

Q. That was 1854? A. Somewhere there.

MR. JOY.—You mean the piers on the lake shore? A. No sir, the north pier, the government piers—until about 1854.

Q. State what was the effect of the pier upon that bar? A. After we run the north pier and the south pier out, every gale of wind appeared to carry away that sand in large quantities on that bar.

Q. Could you see it? A. Every time after a two or three days storm, which we generally got from the north and east, you could see very perceptibly that it went away—that it diminished.

MR. HOYNE.—You could see it go away in every blow? A. Yes sir, after every blow.

Q. Do you mean it was the storm that took it away? A. Yes sir, the storm took it away.

Q. It didn't stay there during the storm, and afterwards go away? A. No sir, I think the prevailing wind took it away,

Q. Do you remember a particular storm in 1836? A. In 1836 we had very high water and very heavy blows. The water was so high it came up over the piers. It was two or three feet above. It came two or three feet over the docks. The docks were probably two and a half or three feet under the water, so that it stood on the docks quite a number of hours. That was in 1836, I think. There was a great portion of that bar went away at that blow, I presume more than at almost any other blow from 1833 up to that time. I think in 1836.

Q. Did that bar then disappear storm by storm visibly?  
A. Yes sir.

Q. When did the last of it disappear? A. I think there was not any of that bar or spit of land out of water when the Railroad Company commenced their work there—that is, there might have been a little along the west here, or east of the angle in the pier, but I don't think there was much of that bar at the east of the angle in 1836. I mean the first angle at the mouth pier [pointing it out in Greeley map No. 2]. Right at this angle was the lake shore at the time I came here in 1833; that is, this pier along here ran straight. It was supposed that by running it out this way in the lake, it would be more difficult for the vessels to get in, with the prevailing winds from the north and east; so the Captain asked permission from the government to cant it to the north, and we did so, and likewise on the north pier. They canted that and then run out parallel. This sand-spit I don't think ran out as far as this angle up close to the pier, at the time the central road commenced their work. It was down here somewhere. There was a little down in there.

MR. WIFLS.—What given spot? A. Yes sir, I think something like that. That was the only part remaining, I think [Points it out].

Q. Can you tell how much was remaining, after the storm of 1836, of that bar? A. I think it took the most of that end off up in the neighborhood of Randolph street, and I don't know but further up.

Q. [Presenting Allen's map] How does that correspond with your recollection? A. I think that corresponds with the ground at that time, as nigh as might be

MR. LARNED.—Then it took away all but what but what is represented on the map here? A. Yes sir.

Q. Do you know anything about a vessel that was wrecked on that bar? A. In the fall of 1836 there was a schooner, I think it was the big schooner "Erie" went ashore somewhere down by Randolph street, and the schooner "Gen. Harrison" broke loose or got adrift and came into the pier—got against the north pier and knocked a hole in her and sagged off and into beach some hundred and fifty or two hundred feet south of the pier.

Q. How near did she get to the main shore, where the old river was? A. She didn't come up nigh that.

MR. WILLS.—Did these vessels pass over where the sand-bar had been previously? A. No sir, I don't think



so. I think they came up in that neighborhood. She was filling as she left the pier, until she filled and rolled over on the beach.

Q She belonged to Capt. Ward? A. I think she belonged to a man named Ward —Eber Ward was the super-cargo. A man by the name of Owen mastered her.

MR LARNED.—When you were at work on the pier during the years you have described, was most of your time spent down there? A. I was there every day, almost. In still weather when we could work on the piers, we were there putting out the piers, and we were getting timber ready on stormy days. We used to take a gang of men and go up the branch to get stone on stormy days. This was in '35 and '6.

Q. You lived near there? A. Yes.

Q. You had opportunity to observe the action of the water? A. Yes sir, I was there every day.

*Cross examined by MR. JOY.*

Q. You spoke of observing this sand bar diminish after a storm of two or three days? A. Yes.

Q. Do you mean diminished in height, width and length? A. Yes sir.

Q. Did you ever see any mass of it go away in one moment? A. No sir, I cannot say I did particularly.

Q. You mean by "visibly diminished," that it was diminished after a storm of some days? A. Yes sir, after a storm you could see it seemed to be less than before.

Q. How long did it continue diminishing until it was all gone? A. I don't think there was much of it there in 1838.

Q. Were not the waters very high in 1838? A. Yes sir.

Q. How much higher than in 1835? A. I don't know exactly. I think a foot and a half or two feet.

Q. How long before they fell off again? A. I think it was not rising in 1838, but diminishing.

Q. It began to fall off? A. Yes.

Q. How long did it take to go down? A. I do not know. Two or three years.

Q. When it went down, did the sand-bar re-appear? A. No sir.

Q. It was worn off in the meantime? A. Yes.

Q. Do you recollect when they were excavating the sand for the Harbor, that they threw it over the south pier? A. No sir, we didn't throw any over the south pier. We didn't have any facilities for throwing it there.

Q. You didn't throw it over? A. No sir. We used to have a dredge, but before we could—(remainder of the sentence inaudible.)

Q. Do you recollect the city dredging and making it wider? A. I couldn't say exactly the number of feet, but a strip was cut up near Rush street bridge.

Q. How far down the Harbor did that extend? A. Down by their freight house. I think it just took the pier out in front of the Illinois Central Freight house.

Q. And as it came this way, it took off more land? A. Yes sir.

Q. It went westward and took off quite a quantity of land? A. Yes sir.

Q. Do you know how wide? A. No sir.

MR. McLEAN.—That was within the last year? A. The last two years

MR. LARNED.—Were you present at the digging through this pier, when these cribs were laid? A. One of these cribs I did—across the pier.

Q. Did you come to the blue clay when you came to put down the crib? A. Yes.

Q. At what depth? A. I think, when we got the machine to going in 1836 we struck blue clay at between seven to eight feet water.

MR. JOY.—Did you ever measure it? A. Yes, we used to measure it frequently.

JOSEPH MEEKER, called by the plaintiff, being duly sworn, was examined in chief by Mr. McLean, as follows:

Q. When did you come to Chicago, and how did you come? A. I came in 1833 across the lake in a vessel, and landed at the mouth of the river. We anchored at the mouth of the river there, about opposite Madison street, and so came in in a small boat up the river. There was a bar at the mouth of the river. We almost touched, and there was a deep channel afterwards as we came up.

Q. Did you observe that bar? A. Yes sir. I have been on it often.

Q. You have been here ever since? A. I have been here ever since I came here with the exception of 1833.

Q. State how that bar disappeared. State the effect upon it of storms—the effect of the piers, and the effect produced by a calm lake, if any. A. Well sir, the bar never disappeared at all, until after the piers or the channel was cut



through. Then there was a violent storm of two or three days. My attention was called to it particularly by reading the morning papers. I have forgotten the time it occurred. I think it was 1836. My attention was called to the washing away of the bar through reading a morning paper, and I went down. Although I had been there time and again, I went down particularly to see how much this storm had washed away the bar, and I found that a good large portion of the bar had been washed away or submerged—perhaps half way up, I should think.

Q. It was washed away, perhaps half way up, by this storm that you spoke of? A. Yes sir.

Q. Did you ever notice the effect of any of the storms subsequently to that time? A. I do not know that my attention was called to them after that. After that it disappeared.

Q. It might have disappeared in another storm after that? A. But I was not down there to notice.

Q. Still it disappeared by subsequent storms? A. As I observed, my attention was called to this one as a very severe storm, and I went down to see the effects. I do not know that it washed away every day, because I was not there every day or week. My attention was only called to it on account of this storm. I think that was 1836—I have forgotten.

Q. Your attention was called to it from the fact that there had been storms, and you examined and saw it affected perceptibly? A. Yes sir. I examined it an hour or two and looked along Lake Michigan to the river, about it, and observed the sand was washed away, and the bar submerged, but I believe some part of it appeared after the storm. The lower end of it was half washed away.

Q. The lower end of it was half washed away at the storm of 1836? A. Yes sir.

Q. About half of it? A. Yes sir. I could see originally it was down to Madison street, or very near it, and after this severe storm I think I noticed it was about half gone.

Q. Half the whole bar gone? A. Yes sir.

MR. JOY.—That is, from Madison street up? A. Yes sir. My attention was probably called to it immediately preceding that. I know of reading about the effects of the storm. I know of shanties being there before the

storm. After the storm they were removed, and one of them was clear submerged under the water, so that the water was through it. It tilted over one side and the water ran through over the floor. The other one was gone entirely.

MR. JOY.—Gone before 1836? A. I won't swear to the date. I think it was the severe storm that occurred then: I don't know it was that year.

Q. Do you know how the rest of that bar disappeared? A. It disappeared, from time to time, by violent storms.

Q. Did violent storms affect that bar? A. I believe the bar would have been there to this day if it hadn't been for the piers.

MR. JOY.—And if we had not had any winds or waves? A. Yes sir.

Q. If you examined the bar after a violent storm, tell me the effect produced upon that bar, from your observation.

A. Well, my attention was called to it, and I went down—

Q. But, after 1836? A. I don't know that my attention was called to it except once, and I believe it disappeared pretty much the next summer afterward.

Q. Through what agency? A. It must have been the storms.

Q. Did you observe any diminution of it from the action of the lake in calm weather? A. No sir; I don't think that I did; I don't think I have been on it in calm weather. I have observed, because I was near the lake I don't think there was any washing away in calm shore. I live now near the lake shore; and from my general observation, I don't think in calm weather there is any washing away. In storms, gravel is thrown up the lake shore.

Q. Has the projection any effect? A. It is my opinion and knowledge that as the piers went out it washed away the point of the bar, as the pier was built out.

MORGAN SHEPLEY recalled by Mr. Larned for further examination.

Q. I want to know what the depth of water was at the point where the pier first met the lake, that you ran through the sand-bar. A. Well, it was right under water; in fact, it ran off like any other beach.

Q. It came right to the beach? A. Yes sir; our crib work came right up to the edge of the water.



Q. How fast did the water deepen out from that point eastward? A. It ran off gradually for quite a distance, and then there was a bar and it was shoal. Between the lake shore it ran off gradually a spell, and then it would rise up a bar, like, and then after it got over the bar, it came right a-top of the water, and that bar was quite a number of feet wide, and then it grew deeper. It lay in ridges that way.

Q. How many feet out before you came to water, eight or ten feet deep? A. I should think you must go 500 feet to get eight or ten feet water.

THE COURT adjourned until 9 o'clock to-morrow morning.

#### EIGHTH DAY—THURSDAY, NOVEMBER 17th, 1859.

THE COURT met at 9 o'clock, and the Jury being called, the trial proceeded.

R. C. BRISTOL recalled by MR. McLEAN.

MR. McLEAN.—Capt. Bristol desires to make an explanation, and for that purpose I have recalled him. Captain state what you desired.

WITNESS.—I was asked in relation to dredging and dumping over the pier. I did not then think of the difference between *over* and *on* to the pier. I know very well the dredge was of such a construction it could not dump it over the pier.

Q. You said yesterday that they threw it over the pier on the bar, as I understood you. A. My explanation is that they threw the clay upon the bar, the dredge not being able to throw it over, and none to my knowledge was put over, except along the old channel. The dredge was comparatively low, and the pier pretty high, and you could only barely land it on the pier. In relation to what I said, that might be pretty strong, in relation to the water washing over that bar, and the difference between a beach upon which

the surf rolls and one not dashed over. Any one conversant with it, can tell by the lake beach, whether it has been washed by the surf or not, at the time, from the character of the beach. That inside of the bar and inside of the river on the west bank of the river was fine and soft, and but little above the clay, whereas, this beach all around this shore, has what we call the shingle of the beach. This coarse gravel that comes up with the surf is left, and is indicated by lines all along this shore, and by them you can see indicated the extent of the wind; at one time, the coarser gravel being thrown up further by a violent gale, and the next day falling short of it, until it becomes quite fine by the ordinary state of the weather.

Mr. LARNED.—Did you see it thrown up at the time you spoke of? A. Yes sir, I have seen it two thirds out. I was here a good deal of the time when they excavated. In 1841 or '42 the water got quite low. We had passed in previously when it had been dredged between the old channel and the mouth. There was a time when they used other means to get the channel clear. They hadn't scows enough, and they used both sides of the pier, to throw over from there into the river, and it landed on to the pier.

Mr. LARNED.—I understand you to say, the clay was thrown up on to the pier, but not over. A. I don't think any was thrown over except along the old channel, to stop up the old channel. It could not be thrown over by the dredge, but it must be done by hand, and I have no recollection of seeing that done.

Mr. JOY.—When you spoke of their carrying it around, what did you mean? A. Well, they carried it around and delivered it to the south pier, right across where it entered into deep water, where it would not be in the way.

EZEKIEL MORRISON, called by the plaintiff, being duly sworn, was examined in chief by Mr. McLEAN as follows:

Q. Were you ever at work on the government pier?

A. Yes sir.

Q. When and for how long a time? A. I came there July 10th, 1833. I worked there about two years.

Q. Where have you resided since that time? A. I have been in the city of Chicago here.

Q. You remember the position of the old sand-bar south



of the south pier? A. Yes sir, I recollect about the sand-bar.

Q. You know how it was carried away? A. Well sir, the first commencement of the carrying away was ; we had very violent storms which washed it away, I should judge nearly half the bar, of the lower part of it. I would not be positive about that, but a good share was carried away in one day and one night.

Q. In what year was that? A. I think it was in 1836.

Q. That was a very violent gale? A. Yes sir, pretty heavy storm.

Q. You know that storm carried away the lower half. A. It carried away the lower part of the bar. It might not have been half, and it might have been.

Q. It was a large quantity of it. A. Yes sir.

Q. State how the remaining portion went away? A. Well, it kept washing away, as nigh as I can recollect—and I use to go back and forth—and it kept washing away, especially in some heavy blows. Whenever we had north-east winds and heavy blows here, it would wash away—not only the small-bar but the main shore.

Q. Below, where the sand-bar had been? A. Yes sir, where it was washed away.

Q. Was the diminution sensible and perceptible during a storm, or not? A. Well, I could see very plainly---that is when we had a heavy storm---that it had taken away the sand bar.

Q. I understand that after the lower part was taken away, a violent storm would wash across that portion to the main shore? A. Well, it took away the lower part of it, the first one did, and then the storm came clear to the bank.

Q. Had a clear sweep to the bank? A. Yes sir, not stopped, because the water was shoal, still it would come over and strike against the bank, and dig into that.

Q. Would it wash over at the pier and strike the main bank? A. I never saw it (do so) at that time.

Q. Subsequently to this storm of '36, what portion remained, or what had gone away? A. There was a portion of the bar, next the Harbor, that remained there some time---next the south pier. I have my doubts whether it ever went away or not. It might, but I should rather think there was some of it there that never did go away.

Q. Had you any opportunities for noticing its destruction? A. Well, at times, when there was a heavy blow. In the first place, working on the harbor, I was acquainted with Mr. Jackson, who had charge of the harbor before I came to Chicago, and when I came I went to work there, and I used to go back and forwards down there to see him. And likewise Major Handy had charge of the works. Maj. Handy, I believe, was the main man. He lived on the lake shore, and I used to go back and forth to Major Handy's. After you got up past the garrison, there was a kind of swamp or slough, where there was high grass, and after that the bank of the river came down bold to the river, so that there was green grass down to the edge of the river. A little back of that there was a bank I should judge six feet high, nearly perpendicular, and one or two coffins, I think, sticking out. I don't know what occasioned this bank to keep falling off; but the first two years it washed so that the coffins came out. A part were sticking out when I came.

Q. How far down was that? A. I should judge probably betwixt Washington and Randolph streets—from Lake street to Washington, somewhere; my recollection is, on Randolph.

Q. Do you remember any house on that bar in 1836, during that time? A. Yes, sir, I think there were three buildings—two or three.

Q. What became of them? A. At the time of that heavy blow it undermined them, and kind of turned them over. I recollect seeing them move one of them. A man named Lewis moved one of them. He took his team and drove into the water; it was about a foot deep; he drove in and took the building away—that is, took it away in pieces. He had some oats likewise he took out—oats in the upper story. The house was careened over the side.

Q. After the storm of '36, what effect did every violent storm show upon that bar? A. Well, as nigh as I can recollect, every storm we had, it washed away more or less.

Q. Could you see the bar was smaller after every storm? A. Yes sir.

Q. So that the way it disappeared was storm by storm? A. I don't know. I noticed it every storm, and whenever I did notice I could see it was smaller.

Q. State the effect of the construction of the piers? A. I should rather think it had a tendency to wash away the sand-bar. I should judge the bar never would have washed



away if the pier had never been put in, from what I have noticed in other places.

Q. What places? A. Buffalo, and likewise I have helped put in several piers out into the lake or the lake shore here.

Q. What has been the uniform effect? A. Pretty much the same as this pier. Wherever you put in a pier it washed away on the south side, and made on the north side. Wherever you have a mind to put it, on the north side it would make, and on the south side it would wash away.

*Cross-examined by MR. JOY.*

Q. You say the first of that going away was in '36? A. I think it was in 1836—the first heavy storm that washed it away.

Q. You say that was the first heavy storm, in 1836? A. Yes sir. I think so.

Q. Did you not notice the effect of all sorts of storms and waves from '33 to '36? A. I was there from the fall of 1833 for two years on the harbor at work, and was backward and forward.

Q. Where were you in '35 and '36? A. I was here in the city.

Q. Were there any winds in '34 and '35? A. In '34 and '35—that is the first part of '35—I don't think there were any heavy winds washing away the bar.

Q. Were there no winds in '34? A. There might have been winds, but the harbor not being carried out, it did not affect the sand-bar, I think.

Q. Did you watch the bar? A. I was back and forth.

Q. You think it was just as high in '36 when the storm came as in the fall of '33? A. Yes sir, just about.

Q. How high was it? A. It varied.

Q. How high would it average? A. I should judge that the sand-bar up near where the pier cut through, was from three to four feet high. It tapered off down.

Q. You mean it remained just the same all through the year to the fall of '36? A. Yes sir, pretty nigh the same thing.

Q. Never perceptibly changed until then? A. No sir.

Q. You spoke about a house being "careened over;" what do you mean by that? A. Well, there were some houses put on the bar there, placed upon posts. I mean that the gale washed the underpinning out on the west side of that,

and the house pitched over, so that the sill struck on the sand.

Q. That is, the block was washed out from under it? A. Yes sir.

Q. Where was that house? A. Well, it strikes me that that house stood in somewhere betwixt Lake and Randolph, I cannot tell where exactly.

Q. Were there not two or three houses down in the vicinity of Madison street? A. No sir, I never saw any houses down on the bar as low as Madison street. I saw a house on the main shore, but not on the sand-bar; but they are not put down there, one just down there, one just above and one just below Madison. There was two along here on the bar, one near Lake street.

Q. But near Madison street? A. Well, sir, they could not have been at Madison. They might have been this side of Madison street, because the river went out there.

Q. In '35 and '6? A. In '34 it did. I think in the spring of 1835, the mouth was open down there.

Q. In '36? I speak of the houses? A. Well, I say I don't think of just exactly the places where the houses stood.

Q. Do you know when the houses were first there? A. I think they were put there in the spring of 1836. It might have been before—in the spring or fall somewhere. I think it must have been in the summer of '36.

Q. Did you see a man drive in from the shore to the house up near Lake street? A. He drove in from the river, where it had filled in. At the time of this gale, it washed over into the bed of the river and filled the old channel.

Q. Where did he go from the shore? A. If I recollect, he drove in down lower than the house stood, and then drove up on the sand-bar.

MR. McLEAN.—Were there any bushes on that sand-bar? A. Well, there were a few bushes stood near the bank of the river where the pier came across. There were juniper bushes grew there, and little bunches of sand were piled up where these bushes were.

MR. JOY.—Where was that? A. That was on the bank of the river, a little south of where the pier went through.

MR. JOY.—How large were these bushes? A. should judge about that high, [indicating a distance of about four feet from the floor with his hand.]



V. A. BOYER, called by the plaintiff, being duly sworn, was examined in chief by MR. McLEAN, and testified as follows :

Q. When did you first live in Chicago ? A. I came here in 1833.

Q. Have you lived here ever since ? A. I lived here to 1834 and returned in 1836.

Q. What time in 1836 ? A. I came back in June, 1836.

Q. You remember this sand-bar ? A. Yes sir.

Q. You remember its appearance before you went away ? A. I do sir.

Q. What was it as to height, length and breadth ? A. The bar extended from near a tree on the north side of the river, until some distance down the lake shore—perhaps opposite Madison Street. If I recollect right it was about two hundred and fifty or three hundred feet in width, and the height was two and a half or three feet, tapering down to a point at the mouth of the river.

Q. What was its appearance in 1836, when you came back ? A. Well, it appears to me, there was very little or no difference in the outlines of the bar, except where the piers had been placed through it.

Q. Are there any circumstances which you can recall to your mind, which induced you to notice that bar at that time ? A. In 1833, I was about the public works there frequently. My father was a contractor for the delivery of the stone, and I was about there very frequently and noticed it.

Q. In 1836, how was it ? A. In 1836 I had no particular business about there, but I was down about the pier and lake shore a number of times, and was down there during the time of the storm of 1836.

Q. State what effect that storm had upon the bar ? A. It was a very severe storm I recollect, and lasted for some time, and the effect upon the bar, was very visible at that time. After the storm was over, it appeared to me as though a considerable of the bar had disappeared—perhaps one third of it, according to my estimation—one third in length. It seems to me it took a portion of it from the upper end down diagonally across.

Q. Were there any vessels shipwrecked ? A. There was a vessel went ashore some distance below, or perhaps near the lower point of the bar.

Q. Went ashore on the bar, or the main shore across the bar? A. I should rather think she went ashore below the bar, perhaps about the mouth of the river.

Q. On the main shore? A. Yes, I think on the main shore.

Q. Subsequently to this violent storm, did you notice this sand-bar and the effect of storms upon it? A. I do not know that I ever observed the effect of any storm on the bar after that, but I noticed from time to time that it seemed to me as though it grew smaller and smaller, but I do not know as I observed any particular subsequent storm.

Q. Did you ever have your attention called to any storm after that? A. No sir.

Q. Were you here before these piers run out? A. Yes sir.

Q. You have stated that you were away and came back, and the bar did not appear to have diminished at all. That was before the piers were extended out, I understand? A. That is my recollection of it. There was no perceptible variation.

Q. What is your opinion as to the effect of the construction of these piers upon the sand-bar? A. I do not know that I ever fixed upon the cause of the disappearance of that bar in my own mind, but in a general way I presume that the extending out of those piers had something to do with it, more or less, perhaps.

*Cross examined by Mr. Joy.*

Q. How long was that storm in '36? A. Well, I think it lasted about three days.

Q. You think after that you could notice that the bar had visibly diminished? A. Yes sir, even during the time that the storm was raging, it appeared to me it was disappearing.

Q. How high was the water at the time? A. The water was pretty high—I recollect the water in the river was.

Q. Didn't it come pretty much over the bar, and was the bar under water? A. Yes sir, and the bar was under water.

Q. Pretty much all was under water, was it not? A. Perhaps one-half of it.

Q. Could you see the effect of the water there on the bar at the time? A. The waves rolled back and forward, and you could see the sand rise up.



Q. Could you see the sand had diminished after a particular wave. A. No sir.

Q. Could you after half a dozen? A. No sir, perhaps not, but in the course of a day you could tell.

ALEXANDER, WALCOTT called by the plaintiff, being duly sworn, was examined in chief by MR. McLEAN as follows:

Q. When did you first come to Chicago? A. I came here in 1837.

Q. What is your profession? A. Surveyor and civil engineer.

Q. Do you remember this sand-bar? A. I remember a portion of it. I should say there was between 80 and 100 feet here left south of the south pier. It was called "the old sand-bar," at that time.

Q. That was in 1837? A. Yes sir.

Q. [Presenting Allen's Map.] Look at that map. Is that correct? A. Yes sir, that is it. But it was nothing near the area that is.

Q. This was made October, 1837. It is on a scale of 100 feet to the inch? A. That would make a difference. I supposed it was one of these small-scale maps.

Q. Do you know how the sand-bar went away? No sir, only by report.

Q. Do you know how the balance of it went away? A. Well, it went away in storms.

Q. You know it went away in storms? A. Yes sir.

Q. What was the effect of these piers on the sand-bar? A. My opinion is based upon experience, more than anything else, that the piers created the washing away of the bar—the creation of the piers washed away the bar.

Q. Have you noticed the formations along the shore of Lake Michigan, so as to be able to give any opinion as to whether the bar would not have washed away, if the piers had not been built out? A. Nearly all the rivers of Lake Michigan, on this shore, put their bars out into the Lake in the same way that this Chicago River did; and where there have not been piers run out across them, the bars remain to this day.

Q. What happened when piers were put out? They were cut off, and the southern bar has been washed away, and the north side has formed an accretion.

MR. HOYNE.—Are you the County Surveyor now? A. Yes sir.

Q. You have held the office of County Surveyor and City Surveyor? A. Yes sir.

*Cross-examined by Mr. Joy.*

Q. You spoke about this little tract of sand just below the piers? A. Yes sir.

Q. That is all you ever saw? A. Yes sir, that's all.

Q. Can you tell when that went away in a storm? A. I think the greater portion of it went away in 1838.

Q. Could you see it? A. I saw it in the morning, and the next morning it had pretty much all disappeared.

Q. Are you sure? A. Yes sir, quite sure. I lived in the Garrison at the time. The wind was blowing north of east.

Q. This was seen under the pier? A. Yes sir. I could see it left probably forty or fifty feet of the bar next morning.

Q. Have you ever been to Calumet? A. Yes sir, a great many times.

Q. To Waukegan? A. Yes sir.

Q. Milwaukee? A. Yes sir.

Q. Been along on the west side of the lake? A. Yes sir; been at every port almost.

Q. Have you made these harbors your study? A. No sir, except here.

Q. Have you made it your study to observe the action of waters upon sand along this coast? A. Somewhat; my business as civil engineer would lead me to.

Q. How long a storm was that you spoke of? A. It lasted about three hours—three to six hours.

Q. It was short and sweet? A. Yes sir. It blowed from the south'ard and westward three days, and then shot around.

Q. From the south and west, three days was it? A. Yes, and then from the north-east.

Q. Which way was it blowing when it carried away the sand? A. North-east.

Q. The south and west did not affect it? A. No sir.

Q. Was it a violent storm? A. Yes sir, and as it got around, it carried it off. There was no object of any consequence between it and the sand-bar.

Q. Then, when the pier was between the sand-bar and the wind, it blew it off. A. There was scarcely any pier there then.



BENJAMIN WILDER, called by the plaintiff, being duly sworn, was examined by MR. McLEAN, as follows :

Q. Col. Wilder, how long have you been in Chicago ?

A. I first landed here in September, 1830.

Q. Have you lived here ever since ? A. I lived in Missouri from that time up to 1838. I moved here in 1838. I have been here frequently. I came here, and was here back and forth, and was here when this sand addition was laid off.

Q. Were you here in '36 ? A. Yes sir.

Q. Do you know anything about this violent storm in '36 ? A. No sir. I left here in September, returned in October.

Q. Did you see the tongue of land in 1836 ? A. Yes sir. I saw the stakes driven for this Walker Addition.

Q. You didn't see the destruction of the sand-bar ? A. No sir.

JAMES CAMPBELL, called by the plaintiff, being duly sworn, was examined by MR. McLEAN, and testified as follows :

Q. When did you come to Chicago ? A. May 4th, 1836.

Q. Do you remember seeing this sand-bar stretching down from the south pier, south ? A. Yes sir.

Q. Can you locate its length south of the pier by any streets now existing ? A. As near as I can recollect, I think it extended from the pier nearly to Madison street, or about there.

Q. Do you remember this storm of '36, that has been referred to by the witnesses ? A. Yes sir.

Q. Can you tell the effect that storm had immediately upon this sand-bar ? A. As near as I recollect, I think it took away about one-half of it.

Q. You saw the sand-bar before, and at the time of the storm ? A. Yes sir.

Q. And that was the effect of that storm ? A. Yes sir.

Q. Did you see the sand-bar after that, up to the time when the most of it disappeared ? A. Well, I saw it at that time. I think it disappeared sometime in 1837, with the exception of a little portion next the pier.

Q. You say it all disappeared with the exception of a little portion next the pier ? A. Yes sir.

Q. Can you state how it disappeared in these times—what was the cause ? A. I think the cause of it was the heavy storms.

Q. Did you see the effect heavy storms had upon it? A. Yes sir.

Q. What was the effect? A. To diminish it with the storm.

Q. Visibly to diminish it? A. Yes sir; it appeared so to me.

Q. Do you know of any vessels being shipwrecked there in the storm of 1836? A. I think there was one.

Q. Do you remember where? A. South of the pier—I cannot tell how far.

Q. Do you remember some houses, or shanties, on that bar in 1836? A. Yes sir.

Q. How did the storm affect them? A. One of them was turned sideways—capsized—kind o' twisted on one side. I don't recollect whether it was taken off the foundation, or not.

MR. HOYNE.—Have you done any work on the bar yourself? A. No sir.

Q. Do you remember the width of the bar in 1836, before this storm? A. No sir, I could not tell you.

BENJAMIN WILDER recalled, and further examined by MR MCLEAN.

Q. Can you tell anything about the depth of the river in the old channel, inside of the bar? A. I think, in September, 1830, when I came from St. Louis here, we went down to bathe in the mouth. The 26th of September, 1830, we went down there to bathe. We went down from the old Fort, as far as Madison street, I think. We went down to the lake; before we got out to the lake, we could see the Indians this way, bathing this side of the bar—in the river, this side, and we came over. It was very cold out in the lake, and we concluded the Indians knew the temperature of the water here, better than we did; so we came over into the river, and after coming across the bar, it immediately dropped down from knee-deep on the bar, into the river.

Q. How deep? A. I don't know—swimming-deep.

Q. Do you know whether that depth continued? A. I do not. I suppose so. I saw, in 1834 and '5, that it was pretty deep along there.

Q. At what time did you leave Chicago? A. I did not come here from 1830 to 1834—after they commenced the Harbor; and I have been here every year since 1834.



Q. What was the condition of the bar in 1834? A. About the same as in '30. I recollect that in going down we stepped it across at the turn of the river, from the old Kinzie House to the lake shore. I think we made it a hundred yards across the bend, right out straight where the pier is now. We paced it across. I think it was about a hundred yards.

Q. That is where the south pier is now? A. Yes sir; right about there, where the pier is now. I came down to see what was the prospect before the sales, about the Harbor. The sales were to commence on the 21st of September, of the Canal Lands.

Q. Where were they situated? A. I think this ground where we are now, the original plat.

Q. When was this? A. In 1830. I didn't come back after that, until 1834

Q. In 1830 you paced it across? A. Yes sir, in 1834, I purchased——

Q. How high was that bar in 1830? A. I think, at the bend of the river, where it turned south, it was pretty bluff, and I should think some four feet high, probably—probably a little more. It descended down towards the south—it lowered gradually.

Q. In 1834, you were going to say something about the purchase of lands? A. In 1835, I attended here at the sale of United States lands.

Q. What was the condition of this bar then? A. It (the river) then came out at the channel between the piers. The sand was then thrown out pretty high, both north and south of the piers. There was no great difference in the bar there then.

Q. What was its condition the next year? A. That was '35. In '36 the pier had got out so far as to stop the current of sand, and it began to accumulate out there; and I think the bar was diminished away from what it had been.

Q. You did not see any storms at that time? A. No sir.

Q. There was no great difference in 1836 from what it was in 1830? A. There was very little difference then.

Q. When was the next time? A. In 1837. In May, 1837, when I came here, the bar was gone probably one-half, and the old channel filled up, down from Madison st., this way.

Q. How was it in 1838? A. It was still decreasing; every storm appeared to wear upon it.

O. C. BAIRD re-called by Mr. McLEAN, and further examined as follows :

Q. You stated, in your examination in chief, that you were here and built a house on that bar—a shanty. A. Yes sir.

Q. State when that shanty was destroyed, what was the cause of that destruction, and all the circumstances connected with it. A. I will endeavor to do so, in the plainest and most substantial way I can, and I likewise do it in this way : In giving my evidence, I do not give it with the intention of becoming a railroad conductor, or anything of that sort ; or, on the other hand, of becoming a possessor of this land. There has been a great deal of testimony given in this case, whereby mine will not agree, in relation to the sand-bar being moved away. In the first place, I will state to the Court and Jury the situation of that sand-bar. Along at the lower end of the sand-bar, where it connected with the lake, it was very narrow, and at the end there it was shoal. The further you proceeded up, the basin widened out and became more deeper. On that left-hand side, the shore side, the bank was more perpendicular than below, so that it was more bold. In 1836, I became possessor of that island, or went on there, under Mr. Moore, to erect this building. I worked there on that island until a certain storm came, and it was washed away.

Q. At what did you work ? A. At joiner work, in that building. I will state to the Jury and the Court, that this bar was washed away in two storms; one I will confine from the 1st of August to October 1st, and the other from the 1st of October to the middle of November. This bar was washed away in that period, in two storms, and these storms were continued ; one continued from five to six, and the other, I think, seven days, blowing excessively one particular way. Now, in relation to this island being moved away by the current of waves passing up and down the lake, I consider it is not so ; and in relation to the waves, the waves proceeding over the bar ; I don't consider that washed it away. Now, I will demonstrate, and show as plain as I can how and what was the cause of this washing away. The wind proceeding up and down the lake may change or alter the position of the island slightly, but the island is there to-day, to-morrow, and henceforth—

MR. JOY.—And forever !

WITNESS —Or it may pass over the Island, and have



effect, but the Island is there yet. Now there has got to be a cause to show how that was done ; in doing so, I will explain to the Court and Jury, in this way : [The witness here used a large volume to illustrate his meaning.] Here we see is the surface of a bar, say ten feet square, we place that against the wind, and the wind passing over here will form a current under here. Now if you can create a current or cause it to pass under there, it will pass off smoothly. Just the same way, this Island came to wash away. As I can explain it to the best of my knowledge, it is this : here is the lake, a dead body of water ; here is the Island or bar as you may call it ; here is an east wind rolling, or causing the water to pass over that bar, and crossing over that bar, it creates a ridge, and keeps rising, and this rise causes a re action, and in that re-action there is a current formed. The higher the waves or water rises, the greater is the reaction. This re-action forms a current, and it passes under, whilst the wind forces the water up on the top. This current coming down in contact with this sand-bar, caused a washing, and this washing carries it off into the dead water back, and the current becomes stopped and the sand falls, and there you will find the sand-bar—further or less according to the height of the water above. That is the way the wind washed away the sand bar and no other. Now, if the sand-bar washed over into this here eddy here, as some of the witnesses stated, you have got to create or form an under-current to produce the washing. Now, if you can show to me, how you can form an under-current so as to produce a washing, then I will acknowledge I am corrected. [The witness illustrated all these explanations with a book.]

MR. LARNED.—We want facts.

WITNESS.—The fact of the case, as near as I know or can understand, is this : in this first gale, which lasted some five or six days, the water raised a considerable height over the sand-bar, and likewise in this gale, there was some ten or twelve feet of this main bank washed away. Now, when the gale went down, or subsided, and the water went down, how was it ? Why, nearly all of one half of that Island was gone and it was all lake.

Q. That was the effect of the storm ? A. Yes sir, that was the effect of the storm. Now, if the waves and storms

had washed this bar over into this channel and this other bank had mingled with it, I would have thought the bar would have been a third or a quarter bigger than it was ; but instead of that, what came off the bank and this bar was all washed away.

Q. What was the effect of the next storm ? A. It commenced on the first of October, and came from the same way—the same direction, and it filled it up here and caused a re-action and under-current and washed away the preceding island, except a small piece up next the pier.

Q. It washed away the whole island except a small piece up next the pier ? A. Yes.

Q. You were there ? A. Yes sir, I was there. My attention was called to it because I saw it was blowing over from the bar. I told Mr. Hoyt my tools were down there in that shop, and I told Mr. Hoyt I had better go down and get the tools out. This was in the forenoon. In the afternoon we went with a boat and got the tools. We got in behind the building and got them out in the best way we could, and got considerable wet, too ; but we got the tools out. This gale commenced in the night, and this was the next day. The gale proceeded that night and the next day, the building was canted over one side a little, and it remained so that day, and the next night, the building was carried away.

MR. JOY.—Carried away by the storm ? A. Yes sir.

MR. McLEAN.—Do you remember anything about a vessel being wrecked there at the time ? A. I think at the time this building was carried off, that there was a vessel wrecked just below on the shore—below the building. It was driven to the shore in the gale, just below where that building was—driven on the main shore.

Q. This second storm you say, took off nearly the whole of the bar that remained ? A. Yes sir.

Q. How much was left ? A. A small piece up next the pier.

*Cross examined by MR. JOY.*

Q. These storms were all the same year ? A. Yes sir.

Q. How long a time intervening ? A. To the best of my knowledge, I think one was in August, and the other in October.

Q. Were you claiming this sand-bar yourself, as a squatter ? A. No sir.



Q. Didn't you tell Mr. Herrington, on the cars, between here and Geneva, that you put that building up for yourself, and that you were going to put up a claim? A. No sir. I told him I helped to erect that shanty, and I was the only person that had possession of it.

Q. Didn't you tell him that you were going to put up a claim for the land for yourself? A. No sir, I didn't.

Q. Didn't you tell him that Moore was dead, and Hoyt was dead, and you were going to put up a claim yourself? A. I asked him in relation to the pre-emption claims—the law—and I told him I helped erect the building, and held possession up until the time it was washed away, and I was the only person on it. I was there to work for Mr. Moore.

Q. Did you tell Mr. Herrington that? A. Yes sir; and his answer——

Q. How came you——

MR. HOYNE.—Let him answer.

WITNESS.—He wanted to know if Mr. Hoyt or I ever proved up any pre-emption. I told him, no.

MR. JOY.—Have you got through? A. Yes.

Q. How came you to tell him you were going to set up a claim? A. I asked him what difference it would make in relation to this suit.

Q. Whether you claimed it, or Moore claimed it? A. Yes.

Q. Did you say anything about Moore in that conversation? A. I don't know but I did. I told him I was in possession of that land.

Q. You put up the house on it, and held it for yourself, for a claim? A. No sir. I didn't tell him I built it for a claim. I told him I held possession there.

MR. LARNED.—For Mr. Moore? A. Yes sir.

MR. LARNED.—That you built the house there? A. I told him I was to work for Mr. Hoyt.

Q. And that Mr. Hoyt worked for Mr. Moore? A. No sir

Q. Was the fact that you built that house under Mr. Hoyt for Mr. Moore? A. That was the understanding at the time.

MR. JOY.—How came you to set up a claim to that sand-bar to Mr. Herrington? A. I didn't know but there was a chance for me to come in and claim by these individuals who

had possession, or did occupy it at that time ; but they were not living, and under the pre-emption law, if being an actual settler on it, I didn't know but there was a chance for me. [Laughter.]

MR. MCLEAN.—You thought if there was a chance for you, you might a well have it. A. Yes.

MR. JOY.—You want to reclaim it when the time comes ? A. I wished to make my statement in relation to the washing away of this island, and I would like to make one comparison, in the city of Buffalo, where the water has washed away into the city, which substantiates, what I pretend was the way this washed away.

MR. MCLEAN.—Never mind that, we only want the facts in this case.

GEORGE W. DOLE, recalled by the plaintiff, and further examined by MR. MCLEAN.

Q. Were you familiar at the time with the Reservation and the Garri-on ? A. Yes sir.

Q. Look at that map, [presenting the Hathaway map,] and specify from your knowledge of the facts, the portion of the ground occupied by the United States as a Military Reserve ? A. Well sir, I always understood that the line ran somewhere near Madison Street—south. On the north it was bounded by the river.

Q. How on the east ? A. It was bounded by the river on the east, and on the north by the river, on the south somewhere about Madison Street, and west by State Street. It was a fractional section.

Q. Did the government ever occupy by the Military Reserve, any portion of land on the other side of the river ?

A. Not to my knowledge. When Gen Scott occupied on the north side, he occupied the Kinzie building, for three or four weeks, with his staff.

Q. That is, he lived there. A. Yes

Q. Did he occupy it as the other portions were occupied on the other side, as a Military Reserve ? A. Well, I suppose not.

Q. What means of knowledge had you, as to what constituted the actual Reservation—what was your occupation ?

A. I came here when Mr. Newberry was acting as sutler, and I came here as clerk for him. After I had been there for some months, Mr. Whiting, the Detroit Quarter Master,



residing at Detroit, sent me written instructions to take charge of the buildings of the Garrison. Most of them were enclosed within pickets. The buildings, under these instructions, were handed over to me, and I took charge of all the buildings in the garrison, and those outside of the garrison—there was a bake-house and a barn outside, I considered all under my charge.

Q. As part of the military possession? A. Yes, as part of the Military Reserve.

Q. Was there anything on the north or east side of the river, that came into your possession, as part of the Military Reserve? A. No sir, not to my knowledge.

Q. Was any ever claimed as such? A. No sir, not to my knowledge.

Q. [Presenting the Beaubien map.] Does that look like the old place? A. About sir. It looks somewhat similar to it.

Q. Is it a correct delineation of the Military buildings and reservation there? A. Yes sir. That is the Garrison. The building was enclosed within that picket. That was the place there. There were one or two buildings outside—a bake-house and barn. They are outside of the garrison buildings.

JOHN K. CLARK, called by the plaintiff, being duly sworn, was examined in chief by MR. MCLEAN, and testified as follows:

Q. You are one of the old settlers, Mr. Clark? A. I have been here—I came here in 1817, in the fall.

Q. Where were you born, sir? A. I was born where Old Fort Wayne is, in Tecumseh's wigwam. I came here in the fall of 1817.

Q. Do you remember the appearance of the mouth of the river and the sand-bar in 1817? A. Yes sir. I used to chase the wolves and foxes around there some.

Q. State where you used to land? A. When we came with light boats, we used to land opposite Mr. Kinzie's House.

Q. Was that on the sand bar? A. Yes sir, we used to camp on the sand-bar there.

Q. Where the mouth of the river was at that time? A. Well, it was just below. I helped build a log cabin near the mouth in 1817, I believe.

Q. Where was it? A. About twenty rods from the mouth of the river on the south side. [Taking Map of 1818.] This is the bar right down here. There is the log cabin there now.

Q. You suppose that is it? A. Yes sir, that is the one I helped to build.

Q. When was that? A. In the winter of 1817. There is a mark there. That is the log cabin.

Q. Does this map correctly represent this sand-bar and the course of the river? A. Yes sir. Opposite the Beaubien House, the old Suttler House, it was higher there. It was about twenty rods wide. It was higher and dryer there, than any other place.

Q. How high was it opposite the Beaubien House? A. Well, four feet high.

Q. Which Beaubien House? Was it the Handy House? A. No sir, the house Dean built—the old Suttler. It was the same year I came to Chicago.

Q. State any circumstance by which you recollect the height of the bar in its centre? A. I used to run around there to get a shot at ducks, and the bar was high enough to hide me, so that the ducks wouldn't see me, that were in the river.

Q. Walking along on the outside, the bar would shelter you? A. Yes sir, next the lake.

Q. The ducks in the river couldn't see you? A. No sir.

Q. [Presenting a sketch.] Here is a sketch of Chicago, taken by Schoolcraft, in 1820. A. I was here at that time. In 1820, Governor Cass was here at the Indian Treaty, and Schoolcraft was here with him. The Indians were camped all along the bar. They came to the treaty, a great many of them.

Q. Were they on the bar below the bend of the river? A. Oh yes, all along below the Beaubien House.

Q. Where was the mouth at that date? A. Well, it was down at the old channel of the river, where it ran out. This channel that was cut through was stopped up then.

Q. When was the channel cut through? A. About 1819 or 1820—I don't recollect exactly.

Q. Who was it cut through by? A. By some troops; I forget who. Major Baker was the commanding officer, I believe.

Q. Where was the ditch cut through? A. Near where the pier is now—where the harbor is.



Q. How deep was the cut made there at the time? A. Well, it was not very deep; the water didn't all run out there, but still run out at the mouth below.

Q. A portion of it below? A. Yes sir; it was never stopped up entirely; but when this channel filled up again, it all ran out below.

Q. How soon did it fill up? In less than a year. It quit that winter, and the next spring there was very high water, and the ice blocked up the mouth of the river, and it overflowed the sands. It was in 1818, in the spring.

Q. Then when the ice blocked up the old channel, it drove across through where the ditch was cut? A. Yes sir; it washed over the bar in two or three places.

Q. When the water subsided, how then? A. The water run out below.

Q. Did the places cut through by the freshet stop up? A. Yes sir.

Q. Can you see that sketch distinctly without glasses? A. Yes sir, I can see it—[Schoolcraft's Sketch, of 1820]—There is the Kinzie House; there is the Council House, built there at the time of the treaty in 1820; there is the old mouth of the river.

Q. Can you trace the river along there? A. Yes, I can see that. There is the Kinzie house. There is the Wolcott house.

Q. Does that seem to be a correct representation, as you recollect it in that year? A. Yes sir.

Q. There is the same on a larger scale. [Presenting the witness the steel engraving of "Chicago in 1820," in "Schoolcraft's History and Condition of the Indian Tribes."]

A. There is the log cabin. It was fifteen or twenty rods from the mouth of the river.

Q. What was the height of that bar, after the turn of the river, down towards the old mouth? A. After it got below the Beaubien house, I don't believe it was more than two or three feet high.

Q. How high, above the Beaubien house? A. Four feet—may be a little over four feet.

Q. In all your experience, you say the Indians camped all along there? A. Yes sir. In the winter when Captain Scott came, I gave up the ground to him.

Q. To chase wolves and foxes? A. Yes sir.

Q. How did you get into the mouth of the river, Mr. Clark? A. The water was deep enough in the early part

of summer, that we always went in Mackinac boats. There was a bar in it.

Q. When were you here again? A. In 1822. I went to Virginia in 1821, and came back again in the fall. I was here in the spring of 1822.

Q. What was the appearance of that bar then, as it regards the mouth of the river? A. Well, it was the same as it was when I first came here.

Q. Was the mouth of the river down below, where the old mouth was? A. Yes sir.

Q. Was there any mouth where this had been cut through? A. No sir, it had been entirely stopped up there. Major Fowle had it opened again. No water ran out of that channel, until Major Fowle had it opened again.

Q. He was in command of the Garrison? A. Yes.

Q. Do you remember the year when that was done? A. Well, I forget the year now. I think it was 1823 or '24. I most forget.

Q. How long did the channel remain open at that time? A. I didn't notice it much after I quit chasing foxes. I was not there so often.

Q. Did it close up? A. Yes, I think it did. It was opened again in the spring. I think in the winter sometime, in 1825, it shut up again. It shut up again sometime in the winter of 1825 or '26. I think the troops cut it open, so that it might wash out deeper.

Q. At the time this channel was opened by Major Fowle, was the old mouth of the river still open? A. Yes sir, and boats run in there.

Q. All the time? A. Yes sir. In the fore part of the season the bar was shoal, and sometimes they would have to drag their boats over the bar.

Q. Do you remember how wide that bar was in early days? A. It was twenty rods wide—the widest part of it.

Q. [Presenting map of 1818] There is the river and sand-bar, &c. Is that a correct representation? A. That's very plain—about as it was.

*Cross-examined by Mr. Joy.*

Q. Do you know when Major Fowle came here in command? A. He was here in 1824, I believe.

Q. Was it not from 1829 to 1833? A. Well sir, he was away before 1833.

Q. What was his name? A. I forget his name now. I



recollect it was Major Fowle was in command. When I got back from Virginia, Major Green was here, and the fort was vacated.

Q. Was it not Brevet Major J. Fowle? A. I believe it was.

Q. Was he not here as late as 1830? A. Green was here when I came back in 1823, and the fort was vacated. I forget how long it was before Major Fowle was here.

Q. Was it not as late in 1829? A. It seems to me it was before that.

Q. Refresh your memory. I find instructions here to him in 1833, was he not here then? A. He was here at the time of the Sauk war. Major Whistler was here then; Major Fowle went away before Major Whistler came; I think he was here some time; he was the next who came after Green went away.

Q. When did Green go away? A. He went away in 1822.

Q. Are you sure? A. Yes. I bought the crops that was on the ground in the fall of 1822.

Q. Was Major Fowle here more than once? A. Not that I know of, I think not—not in command.

Q. You say the river ran across the sand-bar about where the pier is, in 1818? A. Yes sir, 1819, in the spring of 1819, when the ice blocked it up below, it ran over the bar, about two or three places.

Q. Do you recollect having interviews with me three or four times before the last trial of this cause? A. Yes sir, I saw you.

Q. Do you recollect my inquiring very carefully and earnestly, if you remembered having seen this river run over that bar; do you recollect my inquiring? A. Yes.

Q. Trying to trace the bar up from the time you came here until the present day? A. Yes.

Q. Don't you recollect distinctly saying, you never saw it run over there? A. Oh no. I told you it run over; It blocked up and run over in the spring of 1819.

Q. You think you told me that? A. Yes.

Q. Didn't I bring you here to have you testify something of the kind and you could not remember it? A. No sir, I told you the bar was four feet high all along that spring.

Q. But whether the river ever run across there—was I not anxious to prove that? A. I don't know about that?

I know the water did run over there. I know I was after muskrats.

Q. You could not remember this thing then, when I wanted to know it? A. I remember its running over.

Q. Didn't I question you about every year? A. Well, I don't know.

Q. Didn't I see you half a dozen times? A. I never noticed the bar very much after they commenced building the Harbor.

Q. Didn't I ask you half a dozen times about this very thing? A. Yes sir, you might.

Q. Could I get that fact out of you at all? A. I don't know what I did tell you. Didn't I tell you that the bar four feet high?

MR. JOY.—I don't remember what you told me about that; but about the river running across there? A. It run across there.

Q. How do you happen now to remember? A. I don't know. I never examined the bar much, after they commenced building the Harbor there.

Q. I questioned you about the time before the Harbor, every year from the time you came here up, every spring?

A. I forgot how much you did question me, but I know I told you that the water did run over there every time in the spring when the water was blocked up at the mouth of the river; at the same time, the water ran outside.

Q. My anxiety was, to show that the river ran over the bar. A. I don't believe it run over, only when it was blocked up with the ice.

Q. Didn't I ask you whether it ran over at all or not? A. I don't know.

Q. How deep a channel did it make there? A. I didn't notice how deep it was; it just run over; it run out here at one place, just opposite the Beaubien House, and below it run over at another place. The river was then so high you could go all over this prairie in a canoe, and when it broke up, and the ice came down from the Aux Plaines—

Q. You think it didn't run out much below? A. I don't know how deep it was; it might have been a foot—perhaps more.

Q. In the spring, with a flood high enough to run over a bar four feet high, how long would it take it to cut a channel eight feet deep? A. I don't believe it cut that deep at all. It wasn't more than three or four feet deep any how.



Q. Were you here in 1829? A. I believe I was.

Q. Do you remember the river running out there? A. I came down on the bar about that time.

Q. Do you remember the river running straight out in 1829? A. I forget whether it did or not.

Q. You can't remember 1829—were you here? A. Yes sir; I was up on the farm; I forget about what time it did run over. There was a high time of water in 1828 or '27, in the spring, and the bar overflowed.

Q. You recollect that? A. As soon as the water fell, it run down.

Q. Do you remember the year? A. In 1827, or '28, or '29.

Q. Do you think it might have been 1829? A. It might have been.

Q. Is that the time you allude to as the time in the spring when the water was very high, and it ran over in several places? A. I didn't notice how much it washed through where the bar was.

Q. Do you remember its running across there more than once, where the pier is, at the time you have specified? A. I don't remember as I do. In the spring of 1819, when the ice stopped it, it did.

Q. Were you familiar with the bar from 1819 to 1829? A. No sir, I wasn't much on the bar after 1824—after Capt. Scott was here.

Q. Do you recollect its running through in 1824? A. No sir, I don't recollect.

Q. Or 1823? A. No sir, I don't think it was stopped up.

Q. You only remember 1819? A. That's all.

Q. And that is one more time than you remembered when I questioned you before? A. No, I guess not, because I told you it run over once.

Q. Didn't I send for you, two or three times, to prove that? I forget what time was the first time it came in.

Q. What time did you come back from Virginia in 1822? A. In August, 1822.

Q. When did you go away from here—1821? A. No, in the fall before—the fall of '20.

Q. I thought you said '21? A. I forget now. The treaty was in 1820. I was here in that fall, and the treaty was in 1820, I think. I went to Virginia that fall.

Q. How long were you gone? A. I come back the next summer, in August—was gone about ten months.

Q. Which year did you go off? A. I think it was the fall of '20, and came back the fall of '21.

Q. What was the condition of the river in 1821? A. I almost forget. I think it was stopped up in the fall, and in the spring the bar was overflowed some time.

Q. You think it was stopped up in the spring or fall? A. Yes, I think it was in the fall of 1821.

Q. Do you mean the mouth was blocked up? A. Yessir.

Q. By ice? A. Not entirely. The mouth was blocked up in the spring. That was 1819. I didn't notice it much in 1821 along there. I didn't notice much whether it run over the sand. I think it did run over in the spring of 1821.

Q. Where? A. In two or three places.

Q. How in 1822? A. Well, I don't know how it was in 1822.

Q. You do think it ran over in two or three places in '21?

A. Yes, my impression is, it run out at the old place, where the old mouth dammed up.

Q. You think in 1821 it run out in two or three places?

A. Well, it may have been in the spring of '21 or '22—I forget which. It filled up again the next summer.

Q. In the course of the year? A. Yes sir, in the fall, summer or fall.

Q. Are you quite sure you came back here in the spring of '22 from Virginia? A. No sir, I came back in August, '22 or '21. I think it was '22. I spent some time there. I moved Mr. Clybourne here from Virginia. We got here in August. Mr. Clybourne knows the time better than I do. I almost forget.

*Direct-examination resumed by MR. McLEAN.*

Q. Was it not a fact that the old mouth of the river down about where Madison street is, was the ordinary and usual mouth of the river; and that there never was any other mouth except when heavy freshets would come down and cut across the bar, or when the troops did so?

A. There was no water run out there until the first channel in 1819, when the ice blocked it up?

Q. In the spring of 1819, there came a heavy freshet there? A. Yes sir.

Q. Did you ever go in swimming in that river? A. Oh yes.

Q. How deep was it? A. Well, fifteen or twenty feet deep. I used to carry Robert Kinzie on my back and swim across.



Q Whereabouts is that? A. Just below the Fort, where the pier or Harbor is now.

Q. Did that same depth of water continue down until near the mouth? A. No sir, a little ways below the Fort, it became a little more shallow about fifteen feet, I think.

Q. Can you pretend to fix the dates or years at this distance of time? A. No sir.

Q. All you can pretend to fix is, the circumstances—things that have happened? A. Yes.

Q. You remember hunting ducks there. A. Yes.

Q. And camping on the ground. A. Yes.

Q. And you remember the indians camping there? A. Yes, they all camped on that side, at the time of the Treaty. They had been hunting, and camped on that side of the Reserve.

Q. Was that the treaty when Gov. Cass and Mr. Schoolcraft were here? A. Yes. It was the time they purchased out twelve miles here—the time this land was purchased, from the north here twelve miles, due west.

Q. What purchase is that? A. North of here, made of the Chippewa and Pottawatomie Indians, by the Government of the United States.

Q. Who was the officer here? A. I forget who was.

Q. Who was Commissioner? A. I don't remember who was Commissioner.

Q. All you can pretend to remember is, circumstances and facts, and you cannot remember dates distinctly? A. No sir.

Q. Do you remember what ground at that time was occupied by the government as a Military Reserve? A. The south side there. I don't know that they ever had any on the north side. I guess they didn't occupy any on the other side of the river after I came here.

Q. Is it the fact that, from the first time you came here in 1817, down to 1823-4, and all along down to the time these piers were built, the usual and ordinary mouth of the river was down where Madison Street now is? A. Yes sir.

Q. At the end of the bar? A. Yes, it always ran out below this log cabin I helped build.

Q. At times, where they cut a trench across the bar, where the piers now are, part of the water still ran out below? A. Yes, part of it.

Q. You said it didn't run out in several years that Mr. Joy spoke of. Don't you mean that it didn't run at times !

A. As soon as the water fell it came back again. When the ice at the mouth got afloat, it run back again sometimes. I don't recollect how long it did run over, but the channel filled up again in the fall.

Q. You remember when the soldiers cut through ? A. Yes sir ; I forget exactly the year it was in ; I think it must have been that fall and winter.

Q. Why didn't Mr. Joy call you as a witness before ? A. I forget what he did tell me.

Q. Was it not because you could not prove what he wanted ?

MR. JOY.—Just exactly.

WITNESS.—I don't know.

Q. Didn't you tell Mr. Joy the usual mouth of the river was down here at the foot of the sand-bar ? A. Yes sir.

Q. And that it didn't run across up above, except in times of freshets ? A. I told him the water didn't run out there until after the channel was cut ; it run out there sometimes, and was filled up again.

*Second cross-examination by Mr. Joy.*

Q. You say when you returned from Virginia you brought back Mr. Clybourne ? A. Yes sir.

Q. But you don't recollect the year ? You didn't return until you brought back Mr. Clybourn ? A. No sir.

Y. You spoke about a trench being cut across there : did you see it ? A. I was not there when it was cut out. I know it was cut out by the troops.

Q. You can't tell whether that was '27, '28, or '29 ? A. Oh, it was before that—the first channel, I know the last time they cut it out ; I forget which year that was.

MR. LARNED.—It was cut more than once ? A. Yes.

MR. JOY.—When was the first time ? A. I think it was 1820 or '21 ; I was here about that time.

Q. You think you were here at that time ? A. No, not in the spring. I believe it was '20. I went to Virginia in in the fall, and came back in August the next year.

Q. You brought back Mr. Clybourne with you ? A. Yes sir. I think it was in '20 ; I forget whether it was in '20 or '21.

MR. McLEAN.—It was the year of the Treaty you went to Virginia ? A. Yes sir.



Q. And the year afterwards you came back ? A. Yes sir, in August.

Q. You fix the circumstances by the Treaty, and not by the date or year ? A. Yes sir.

MR. JOY.—You fix the time of your return by bringing Mr Clybourne back ? A. Yes.

MR. MCLEAN.—Did the Indians go and bathe in the river when they were camped out there ? A. I don't know as they went to bathe, they sometimes came in there at night, they generally bathed in the lake.

GILBERT KNAPP, called by the plaintiff, being duly sworn, was examined in chief by MR. MCLEAN, and testified as follows :

Q. Captain Knapp, when did you first come to Chicago ? A. In 1817.

Q. In what capacity ? I came up to make an exploration on the lake ; I just came out on the lake with Captain Rock (?)

Q. Were you in the Revenue Service ? A. Not at that date, I came to make myself acquainted with the lake ; I was in a schooner named "The Wayne," Captain Rock (?) an old sea captain.

Q. You came to Chicago ? A. Yes sir, came here with goods, I believe it was for the army.

Q. How were they landed ? A. In boats, they were brought into the river and brought up.

Q. From the old mouth of the river ? A. Yes sir.

Q. [Presenting map of 1818.] Does that correctly represent the locality according to your recollection ? A. I must look over it. There was the suttler's store, the factory and the buildings where the suttler kept his shop down below there.

Q. Do you remember the Kinzie House ? A. Oh yes, I know all about that. Down south here somewhere I think was the suttler's.

Q. Here was the Beaubien house ? A. Well I could not identify it exactly, but somewhere in this neighborhood. We landed and came round up through the mouth there.

Q. What I want to get at is, whether the mouth was up here opposite the fort buildings, or down south there ? A. It was down there.

Q. Could you tell what was the height of the bar at that time ? A. No sir, I could not tell how high it was.

Q. How long did you remain? A. At that time I think it was a couple of days.

Q. When did you come next? A. I think it was in 1824 sir.

Q. [Presenting Schoolcraft's sketch.] Look at that sketch made by Schoolcraft in 1820? A. This is the Beaubien house, and there is the Kinzie house, etc.

Q. I ask you whether this bar, or tongue of land is, correctly represented according to your recollection? A. It came out here somewhere by these buildings, I could not identify it exactly. It formed along the beach—that tongue of land there did.

Q. There was no mouth up here at the time? A. No sir, I think not.

Q. How was it in 1824? A. I have been speaking of 1824. What I said in the first place was of 1818; this last was 1824.

Q. How long were you here in 1824? A. Well sir, I cannot tell, but a good many days—I should think a week or more, and I don't know but ten days—I could not tell.

Q. How did you come here? A. In the United States Revenue Cutter.

Q. Where did you come in at? A. We came in to the bar then by that channel—over that channel. I don't think it had changed much. It seemed to be about where it was when I was here before. It had changed, may be, 200 feet north or south of it.

Q. Were any goods taken in over that bar? A. No sir.

Q. Do you know anything of any water running over when you were here, at this bend of the river? A. No sir, not at that time.

Q. Did you at any other time? A. Well, in 1834 I think it might perhaps. I came up here in a vessel—a small cutter. I had heard the channel was straightened out and improved in 1834, I think it was. I had understood it had been opened by the government.

Q. Prior to that time you do not know? A. No sir.

Q. Had you been sailing back and forth to this port between these dates? A. No sir. I came here to take some of the officers of the government to Mackinaw.

JUDGE MCLEAN.—Did you state where the mouth of the river was at that time? I was engaged in conversation. A. Yes sir—about where it was. I was here in 1817, and I think in 1824. I am pretty sure, because of the circum-



stances connected with it. I was called here in a hurry, and have not had a chance to look at my journal.

JUDGE McLEAN.—Could you designate where the mouth was at that time? A. As nigh as I can recollect, that is about it [points to the map of 1818]. It seems to me the length of it is full as long or a little longer, but it was south of the Fort. It might vary a little.

MR. LARNED.—In 1824 it was about where it was in 1817? A. Yes.

Q. [Presenting Hathaway map]—How does that strike you? A. That is about the shape of it. It seems to be a little longer.

Q. Do you remember the distance of the length of it? A. No sir.

Q. Can you fix the mouth of the river by any old house? A. Yes.

Q. What old house? A. I think there was a suttler's shop the first time I came here, and the second time too. It was a building belonging to the United States, and a man named Platt (?) used to have goods here—Indian goods—to distribute out. It was kept by him; and that was near the Beaubien house. I cannot say which was below, but it was in that neighborhood. The mouth of the river was somewhere near there.

Q. Do you mean the Dean house? A. Yes; it is the same building as the sutler's house. I think Capt. Whiting was the sutler at the time. [Taking the Schoolcraft map] It was down in that neighborhood. I could not say where it was located exactly, but it run up along the beach.

Q. [Presenting a map] Does that have it located upon it? A. Well, it was down here in this neighborhood. I cannot fix the precise spot.

Q. You went in down at the mouth, and came around up the river to the east of the Fort? A. Yes sir.

*Cross-examined by MR. JOY.*

Q. You were here only twice before the pier was built? A. I am not certain, sir; I am trying to recollect whether I was here three times. I remember I was ordered to take Senator Trimble—U. S. Senator, I think, from Ohio, who had been a Colonel the Army, and who was in feeble health—and convey him to Mackinac; but in what year it was, I cannot mind.

Q. You were here two days? A. Yes sir, the second

time I think we were here ten days, I went in with a Collector, (?) and a friend of ours, and came up the river.

Q. The next time was in 1834? A. Yes sir, then the settlement was begun here.

JULIAN S. RUMSEY, called by the Plaintiff, being duly sworn, was examined in-chief by MR. McLEAN, as follows:

Q. What time did you come to Chicago? A. I came here in July, 1835.

Q. Do you remember the appearance of this sand-bar that has been spoken of? A. I do not know that I remember it exactly sir, on the day that I came here, but since, I do. I remember as well as a man could be expected to remember. I was familiar with the sand bar.

Q. [Presenting Hathaway's Map.] Does that correspond with your recollection of it, at that time? A. Well, the general appearance seems to be somewhat as it was. I don't think I could state that the mouth had as broad a sweep as it has there. I don't think it did.

Q. About where did it empty out? A. To the best of my knowledge, in the winter of 1837 and '8, it emptied out two or three hundred feet south of Madison street.

Q. In the winter of '37--'8, the river emptied here? A. Yes sir; to the best of my recollection. I don't know but I would like to correct that. I am trying to recall the dates by other circumstances. I will say '36—7—I think that is more correct—it ran out at Madison street. I think in '36—7, it emptied out a little south of Madison street—that is, the old river extended down to that point. I don't think it emptied out, because the new channel was open.

MR. JOY.—You say it extended down there in the winter of '37—7? A. Yes sir, to the best of my recollection.

Q. And the new channel was open? A. Yes sir, the piers were built across the bar. The vessel I came in, anchored in the lake, and we came in in a yawl-boat, and it got aground between the piers; that was in July.

Q. Can you tell what caused that sand-bar to disappear? A. Well, I have a theory of my own, as to what caused it to disappear, if you want it.

Q. I want to know the facts, do you know any facts, like storms, the action of the lake, the piers, or anything of that sort? A. Well, it would be pretty hard for me to testify



as to a positive fact. I suppose the building of the piers out there caused the seas to set around the ends of the piers, and create a certain convulsion of the waters which gradually washed the bar away. I judge that from the fact that I know that not only the bar went away, but the main land afterwards washed away; but at the same time, I don't know that I could swear to it positively.

Q. You say "gradually" washed it away. What do you mean; did it go away in calms, or in storms? A. I have no doubt that the storms washed it away a great deal more rapidly than at other times.

Q. Did you ever see the effect of a violent storm upon it? A. Yes sir, I remember, without being able to tell when, that on some occasions, in violent storms, the bar disappeared more rapidly than at other times. I remember once there were one or two houses washed in the lake in a short time.

Q. What was the effect of that storm? A. To the best of my recollection, the two houses I saw there were washed away in a very short time, during one gale of wind. I cannot say the exact time. I know they disappeared, and it was a subject of comment and conversation here in town. It washed away the foundation of the houses. I cannot tell how it was done. I know they were washed away in consequence of a gale of wind.

Q. Was the bar there afterwards, where they stood? A. To the best of my recollection it was not.

Q. Do you remember any other storms? A. I remember several storms—a series of gales of wind from the north, probably the northeast, when several vessels went ashore, and when I was on the beach, and rendered some assistance in trying to save the property and lives of persons. It was sometime during the season of navigation of 1836 or '7—perhaps as late as '38—I should say about 1837, when a number of vessels went on shore. I remember the names of one or two. The schooner "Celeste" was one. The schooner "Erie" was one; she was afterwards wrecked. The "General Harrison" went on once. I don't recollect the date.

Q. What was the effect of these storms? A. I believe the effect of these storms was to wash away the bar, more a great deal than in calm weather.

Q. Was it a perceptible diminution before and after the

storm ? A. I should say it was, particularly the gale that washed away those two houses.

Q. Do you remember when this bar finally disappeared, up to within a short distance of the pier ? A. Well, I don't know that I can say that I do. I remember a circumstance in reference to some matters that are of small moment at this time, or would be so considered now, but were of a good deal of moment to me at the time, and that would induce me to think that a portion of that bar was up near the pier, in the spring of '39. I was young at the time, and was a good deal given, as most boys were, to boating, &c., and I had taken a great interest in the wreck of a boat on the end of the bar, near the pier, which I afterwards obtained as my own property, after it had been removed from the bar, on which it lay buried. It was a boat belonging to the schooner "Celeste" originally, of which I have spoken. It lay buried in the sand on that bar, near the pier. I understood it belonged to a Mr. Armstrong, in the employ of G. S. Hubbard, at his warehouse on the river. I made arrangements with him to get the boat. Although it was in a very bad condition, I thought I could make something out of it. From that circumstance I remember, that when I finally got the boat, she was taken up from the bed of sand, and was lying on the south of the pier, right opposite to the pier. I think he gave me the boat. He thought it was so bad it was far beyond repair, and he would give it to me. We rolled her over on the bar one or two times, and we got her up to the pier and towed her up to the store, where I was employed doing business as a boy, and I went to work and repaired her, and made a sail-boat of her. I should judge there was some of the bar left then. That, I think, was in the spring of 1839.

Q. To what distance did it extend down ? A. Without being very positive, I should not say more than two or three hundred feet—two to four hundred feet.

Q. How wide ? A. I should judge the bar at that point would be three hundred feet wide, at the same time I am not positive about it. I only give my best recollection. In the winter of 1836—7, to the best of my recollection, I was employed in a store of Wright's, which was situated about where the foot of State street now is. At that time, the Fort Dearborn Addition to Chicago, was unoccupied except by the Garrison, and some tenements between State street and the Garrison ; and on the bank of



the lake were one or two houses. Mr. Wright lived on the corner of Madison street and Michigan Avenue in the old homestead now occupied by Capt. Webster. I was employed by him in the store ; I boarded at his house, and we travelled across there at all times. The way I am able to remember it, is from the fact that on some occasions, I used to go down to the shore and skate up to his house on the ice. I used to go down and climb over the south pier and skate up to his house, on the corner of Madison and Michigan Avenue.

*Cross-examined by MR. JOY.*

Q. What time was that? A. To the best of my recollection, the winter of '36—7. The house is on the corner of Madison and Michigan Avenue, on the south-side, to the best of my recollection.

Q. You speak of this storm of '36, and say, these houses were washed away. Do you mean they were carried away by the storm, or afterwards taken down? A. To the best of my recollection they were carried away in consequence of the storm.

Q. Do you recollect seeing them after the storm passed away? A. I do not. I don't remember ever to have seen anything after the storm. I did not testify that the storm was in '36.

Q. But the houses were there in '36. I want to know what you remarked. Don't you recollect what they looked like after the storm? A. No sir, not after the storm ; I remember seeing them previous to the storm ; but never afterwards.

Q. Then you don't recollect how they looked after the storm, or whether they were there or not? A. No sir, of course not ; I don't know how they looked, if I never saw them.

Q. You think the sand-bar was affected more by storms than calms? A. Yes sir.

Q. Would not all sorts of weather affect it? A. No sir, I do not think perfectly calm weather would affect it much.

Q. Take it half way between a calm and a storm? A. I should think a wind from the northeast or east might affect it. I know there was a deep channel around behind that bar, and I know several persons were drowned there, being unacquainted with it and finding it deep. The people were in the habit of getting water from there, and water carts backed in, sometimes found it to go off down very sudden.

Q. How long did it continue? A. I don't think the bar

was entirely washed away, and the lake resumed its natural depth there, until — well, you ask a question I cannot answer positively.

Q. Were you in the habit of swimming there? A. I was in the habit of going in swimming there.

Q. Did you go in swimming there? A. I don't remember.

Q. How long did that remain there below the pier? A. I presume there was a difference in the depth of water there, from what it was on the north side.

Q. Don't we have a great deal of wind that affects this shore—ordinary winds, when there is no storm, and don't you see the waves break against the shore as high as this room? A. Well, it would take a pretty severe gale of wind to dash it that high.

Q. You see it dashing all the time? A. Yes sir, any time; I have no doubt if the wind was from the right direction—the northeast—it would affect it so; if it was from the northwest, it would not affect it so.

Q. Would not a moderate wind from the northeast throw them up against the sand-bar? A. Yes sir, certainly.

Q. And that would gradually wear it away? Yes sir, I judge it would, with the present condition of the piers.

Q. Not quite so rapidly as storms would? A. Yes sir.

Q. But, still, more rapidly than a calm would? A. Yes sir; that's about the way it stands. I have noticed the northeast gale fetches the greatest sea.

Q. Do you think we ever have a season without these gales? A. Hardly ever; we have, I think, three or four of them.

Q. Very often vessels are wrecked on this coast? A. Yes sir.

Q. Within the last two years? A. Yes sir.

Q. Two or three times in the last ten years? A. Yes sir. I think there has not been any three years we have escaped gales of wind that have wrecked vessels on this coast.

*Direct examination resumed by MR. McLEAN.*

Q. You say none of those gales would have affected this, if the piers had not been there? A. No sir, I didn't say so. I do say, I have no doubt the effect upon that shore of that south pier has been very materially altered in consequence of building the pier out. I have no question about that, in my own mind. I think the result of the experience of every body shows that in consequence of building out piers, the gales, coming from the north, cause a sort of current, or sea, to set around the ends of the piers, which has produced here



the washing away, not only of the bar, but of a portion of the Reserve, that, I understand, was intended by the City for a public park of twenty-five or forty acres, stretching up for half a mile.

Q. Wasn't a large portion of this railroad track washed away lately? A. Without having been to see it, I suppose there was. I saw it so stated.

MR. JOY.—Has not that breakwater been breached a dozen times since that railroad was built? A. No sir; I have not known it to interrupt the trains.

MR. McLEAN.—Did not this bar go away storm by storm? A. Well, sir, I think the bar washed away a great deal more in storms than at other times; at the same time, a half-gale of wind would diminish it to some extent.

Q. Would not the storm diminish it so that you could see the diminution after the storm or gale was over? A. I have no doubt it would. I think a severe gale would wash it away, so that any casual observer would remark it had diminished, during the time I speak of—from '36 to '38.

MR. JOY.—Do you say it would waste away so that a diminution could be seen? A. I mean to say a man might, say, for instance, after a severe gale of wind of three days, see that there had been a difference.

MR. McLEAN.—In a gale of three days, could you not see it as the gale went along? A. That I cannot tell you. I do not remember the gradual diminution of the bar in consequence of any one gale of wind. I think I remember the fact that after a heavy gale of wind of two or three days had subsided, it was very perceptible, and very patent to every one, that the bar had very seriously diminished. I do not know that I could see it during every gale.

CHARLES V. DYER, called by the plaintiff, being duly sworn, was examined by Mr. McLEAN, as follows:

Q. When did you first come to Chicago? A. On the 20th of August, 1835.

Q. Do you remember this sand-bar? A. Yes sir.

Q. What was its character and position in regard to the old mouth of the river? A. The old mouth of the river was away low down the shore.

Q. When? A. I should think as low down, or as high up, as Madison street.

Q. [Presenting Hathaway's Map] Do you remember

how far below the south pier the bar extended at the time?

A. There was considerable land there at the time, and if my recollection serves me, there were some erections on the ground—buildings.

Q. Do you know who put them there? A. No sir.

Q. Do you remember the disappearance of these shanties, and the bar, by storms? A. I recollect it went off pretty suddenly.

Q. By storms? A. Yes sir.

Q. Describe the storm—what storm it was?—A. It is very difficult to recollect precisely the year. I came here in 1835, and there was some in the immediate locality near the pier in '36 and '37. I should think it was the autumn of '36 or '37.

Q. What description of gale was it that carried this off so suddenly.

Q. Did you observe it before and after the storm? A. Yes.

Q. What was the difference? A. I should think some days, while the storm was prevailing, there was not much to be seen; after the gale subsided I should think there was the bare back of the bar exhibited itself from the pier south some little distance, especially in quiet waters. During the continuous gale there was very little of the bar visible; that is my recollection, there was very little. When the gale subsided there was the bare back of the bar down some little distance.

Q. Where was the balance of it? A. Submerged and washed away—it seemed to be.

Q. There was water where there was land before? A. Well, I don't know that I paid particular attention to it at the time, to see how much was left remaining, but I know the remark that was made about town—there had been a law suit about that land, and there was a joke about town that it seemed to have been carried up to the highest possible court and settled.

Q. Who were the parties to that controversy? A. I think Henry Moore was one of the parties. He was interested. That was the remark in the streets.

Q. That that was the decision of the high court? A. Yes sir, that seemed to be the talk in the streets at the time.

*Cross examined by Mr. Jox.*



Q. How high was that sand-bar before the storm? A. I don't know.

Q. Did you observe it? A. I did not. I don't remember precisely what year it was. I know about '37—some time in that year or the beginning of '38, I was located in the Garrison, and had charge of the medical department of the troops, after the surgeon had been removed to some other post, and I think it was about that time, in 1837, that that storm was.

Q. Do you know what time you went into the Garrison? A. I can't tell precisely, but I think during '37.

Q. Are you quite sure it was not during '36? A. I know it was not in '36 I went into the Garrison.

Q. Do you think this storm was while you were in the Garrison? A. I think it was. There had been a storm previously in the autumn of '36.

Q. But this storm you speak of was while you were in the Garrison? A. Yes.

Q. After that storm, you think there was a little left south of the pier? A. Yes sir. There was a circumstance which makes me recollect. A family named Small was wrecked and were brought to my house.

Q. Do you recollect the effect of the storm of '36, the fall before? A. I don't think that I do.

Q. Do you recollect seeing the houses after the storm? A. No sir.

Q. Did you go out particularly to look at the sand-bar after the storms? A. No sir, I don't know as I did specially.

Q. What you testified to, was a sort of laughing talk around town? A. What I testified to about that suit was.

Q. You don't recollect looking after the storm? A. I don't presume I had any particular call out there, and I presume I didn't go out specially.

Q. How long were these storms? A. Oh, several days.

Q. Each of them several days? A. Yes.

Q. You don't remember how high the sand-bar was before that? A. No sir.

Q. Do you recollect seeing it shortly before the storm? A. I recollect seeing it before the particular storm that took it away.

Q. That was in 1837? A. I was in the Garrison in

1837, but whether this particular storm was in '36 or '37 or '38, I couldn't certainly say. I say that Small family was brought to my house in 1837; I believe that was this storm, I think so. It is my impression now that it was 1837.

Q. How much was left after the storm of '36? A. I couldn't tell. It took the most of it away.

Q. Were you ever out on the sand-bar to see?

A. No sir, I never was out on the sand-bar in my life.

*Direct examination resumed by MR. McLEAN.*

Q. Can you tell exactly what the Reserve was, and how it was actually occupied as a military reserve? A. I never understood the military possessions to extend beyond the pickets.

Q. Then they certainly didn't go across the river. There never was a claim set up to a military possession beyond the pickets? A. The officers didn't so regard it. Beaubien had a garden there, and he was in the habit of driving people off when they came to pick his currants. [Laughter.]

Q. You can't remember particularly as to the date of these storms? A. All I know in regard to these very severe storms, to show that it must have been in 1837 or '38, is that this family of Small's came to my house.

Q. Was this storm that destroyed these shanties, the one that took it off to this back-bone, when there was the town talk about the suit? A. That might have been in '36, but I am not able to say. I only judge by my residence in the Garrison, and the incidents of that storm, and the Small family being driven into my house. That must have been after I left there.

Q. But there might have been another storm besides that one that one that drove them to your house? A. Oh, yes.

Q. But the effect of this storm to sweep away the sand-bar, and the talk about this suit, you remember as a fact?

A. Yes sir.

MR. McLEAN offered in evidence the Bill in Chancery in the case of the United States *vs.* John B. Beaubien *et al.*, to show the limit of the Reserve and that it did not extend to the north or east side of the river; but he subsequently withdrew it, upon Mr. Joy's stating that the defence would make no question about that boundary.



MR. McLEAN offered in evidence the Depositions of Samuel L. Hinckley and Samuel Wells.

MR. BECKWITH objected, pending which objection.

Court took a recess until half-past two o'clock.

#### AFTERNOON SESSION.

Court met at half-past two o'clock.

THE COURT (Judge McLean) decided the question pending before recess, sustaining the objection and excluding the Depositions.

MR. WILLS offered in evidence the Bill in Chancery in the case of *United States vs. Beaubien et al.*, [offered and withdrawn in the forenoon].

MR. BECKWITH stated that he would waive the objection previously raised by him [see page 72] to the deed from Samuel Hinckley to Samuel L. Hinckley.

MR. McLEAN [in return] agreed to admit the Report of the testimony of Archibald Clybourne, taken at the former trial of this cause, in so far as it related to the time of his coming from Virginia to Chicago [referred to by the witness Clark], unless Mr. Clybourne asked to correct it; and he proceeded to read the passage agreed upon, as follows:

Q. When did you first come to Chicago? A. The fifth "day of August, 1823"—the same to be considered as offered by the defendants.

THE COURT (Judge Drummond), decided the question raised in reference to the three contracts; (1) agreement between George C. Bates, Cogswell Green and John A. Wills, dated February 25, 1857; (2) between George C. Bates and Cyrus H. McCormick, dated Sept. 5, 1857; (3) between George C. Bates and Thomas Armstrong and James Averill, dated May 22, 1857, [see page 80] sustaining the plaintiff's objection and excluding the documents.

THE COURT (Judge Drummond) also decided the question raised by the plaintiff's counsel, in relation to the three contracts previously offered, [see page 175] viz: (1) contract between Ogden and McCormick and Gray; (2) between Gray and Ogden and Jones; (3) between Ogden and McCormick, overruling the objection and admitting them as evidence.

MR. McLEAN requested the Court to note the plaintiff's exception to the above ruling.

MR. McLEAN, after some discussion, and an expression of willingness on the part of the Court to hear further argument upon the objection raised by him [see page 78] to the deed from the Secretary of War to the I. C. R. R., proceeded to argue at length the inadmissability of this deed, as well as the series of deeds from the riparian owners, [see page 79].

MR. JOY replied, and Mr. McLean rejoined, closing the discussion.

THE COURT took the matter under advisement.

MR. WILLS offered in evidence a series of letters from the Commissioner of the General Land Office, in reference to the practice of the government in re-surveying lands.

Court adjourned until nine o'clock to-morrow morning.

#### NINTH DAY—FRIDAY, NOV. 18TH, 1859.

Court met at nine o'clock.

THE COURT decided the objection raised to the deed of the Secretary of War and the various deeds from riparian owners, overruling the objections of the plaintiff's counsel, and admitting them as evidence ; to which ruling the plaintiff's counsel excepted.

MR. JOY offered in evidence the Charter of the Illinois Central Railroad Company from the State of Illinois.

MR. WILLS objected.

The COURT overruled the objection. Plaintiff excepted.

MR. LARNED stated that the defendants' counsel had agreed to waive the objection raised to the Deed from Richard Patrick to Cyrus H. McCormick.

MR. JOY said they waived formal objections to the plaintiff's title.

MR. JOY objected to the series of Letters from the Land Office, offered last evening, as evidence for the Jury, though he had no objections to them if offered for the instruction



of the Court ; with which understanding they were admitted.

MR. LARNED offered in evidence a Confirmatory Deed from William B. Ogden to Cyrus H. McCormick, dated September 28, 1858, for Water Lots 26, 27 and 28 in Kinzie's Addition.

MR. WILLS presented the following Instructions on behalf of the Plaintiff :

#### PLAINTIFF'S POINTS.

The Plaintiff's counsel ask the Court to charge the Jury—

I. That Robert A. Kinzie, by his Pre-emptive Entry of 7th May, 1831, and the Patent of the United States, dated March 7, 1837, acquired title to all that lot or north fraction of section 10, town 39, N. range 14 east of the 3d principal meridian, bounded as follows : North by sec. 3, West by sec. 9, South by the Chicago River to its mouth, and East by Lake Michigan, and if the Jury believe from the evidence adduced that the tongue of land known as the "Sand-Bar," was, *at the time of Kinzie's entry, 7th May, 1831, a part or continuation of the main land on the North*, then the natural monuments of the River and Lake, govern the rights of the purchaser, and Kinzie's title would include all the land lying between Lake Michigan on the East, the Chicago River on the South and West, down to the *ordinary and natural* mouth of said river. 21 Howard, U. S. Rep. 305, Brown vs. Huger

II. That the construction by the United States of the artificial channel, or Harbor, across this tongue of land, known as the Sand-Bar, could, in no manner, legally change or affect the legal boundaries of the fractional section of which it formed a part, and that by the diversion and closing of the old channel of the Chicago River, Henry Moore, by virtue of his Riparian rights, *took to the centre of the old channel on the west*, and was invested with all the ordinary rights and privileges of a Riparian owner, on the shore of the lake.

III. That the acquiescence of Kinzie or his grantees, in the construction of such harbor or piers, constituted a dedication to public use of *only* that part of the sand-bar, included between the north and south piers.

IV. That the plaintiff has a good legal title, by mesne conveyances from Robert A. Kinzie, to all the lands in said fraction, lying south of the south pier, and included between Lake Michigan on the east; and the centre of the old channel of the Chicago River on the west, down to its ordinary natural mouth; and that if the jury believe the evidence adduced by the plaintiff, by witnesses, in connection with the maps and plats, there can be no reasonable doubt as to the precise location of the "sand-bar."

V. That as between plaintiff and defendants, the contracts between Ogden and McCormick and others, for the sale of water lots 26, 27, and 28 were entirely merged in Ogden's deed to McCormick; and that the boundaries of the water lots in said deed, can in no manner be restrained or affected by the antecedent contract.

VI. That a party who has placed his paper title on record, has given such notice as every person is bound to *know* and *respect*, and the law does not require him to go further; that he cannot be *equitably estopped*, in the action of ejectment, by simple silence on his part or that of his grantors 21 How. U. S. Rep., 481. *Fenn vs. Holme*.

VII. That if the jury believe, from the evidence of Judge Douglas and the witness Parker, that the defendants had actual notice, or had constructive notice, from the records, of the plaintiff's title, and with such knowledge chose to go on the land and make improvements, they did so at their own *risk* and *peril*.

VIII. That a grant of land includes not only the *surface* of the earth, but *everything under* or *over* it, and that a simple removal of *soil* or *surface* cannot change the title to the *remainder*; and if the jury believe from the evidence adduced, that the plaintiff had a legal title to the tongue of land, then the destruction of the *surfaces* by the overflow of the lake, in no manner affected the plaintiff's title to the *Substratum* or *Situs*, whether such overflow was *gradual* and *imperceptible*, or *sudden and violent*.

IX. That by the common law, an absolute title to real estate can never be lost by simple *Abandonment* or *Non-user*, for any period of time, however long. That to produce this effect, it must be accompanied by such adverse occupancy as will give title under the statute of limitations, and then the title is derived from *adverse occupancy*, and not *abandonment*. That water in itself is not an adverse occupant.



and that the exercise of the right of navigation over submerged land is simply a *license*, and confers no title to land —17 Howard U. S. Rep., *Boston vs. Lecraw*.

X. That in an action of ejectment to recover the possession of land, as in this case, the TIME or MANNER of its overflow by water is wholly immaterial, provided its boundaries can be identified.

XI. That the rights of the public in waters covering the submerged lands of the plaintiff or his grantors, continue only so long as they remain *unreclaimed*, and only so far as public necessities may require. That in the absence of public necessity, the right of *reclamation* in the plaintiff is *unlimited*, provided he can show title and identify his property. That the *perceptibility* or *imperceptibility*, or the *suddenness* or *slowness*, of the overflow, is important only so far as they furnish evidence of identity, and thereby incidentally of title. 17 Howard Rep., *Boston vs. Lecraw*.

XII. That if the jury shall find, from the evidence adduced, that the overflow or washing away of the surface of the tongue of land known as the sand-bar, was caused by *artificial agencies*, to wit: the *construction of the piers*, thereby giving new direction to the natural forces of the elements, then the title of the plaintiff to the *substratum* or *foundation* was *not lost*, or changed in any manner, whether such overflow was *gradual and imperceptible*, or *sudden and perceptible*.

XIII. That the Grants of the Secretary of War to the defendants, and those through whom they claim, confer no title or Riparian rights, *east* of the *middle* of the *old channel* of the river :

1. Because he had no right under the acts of Congress to make *such grants*.

2. Because he could not grant a SECOND TIME, that which had been already granted.

XIV. That if the Plaintiff has shown title to the "SAND BAR," and the time and manner of the loss of its surface is *relied* upon by the defence as *divesting* that *title*, then the burden of proof has changed, and the Plff. is no longer bound to make his case *affirmatively*. That the burden of proof is then, with the defence, and if they leave the questions of fact and of law arising thereon DOUBTFUL, all presumptions of law are in favor of continuance of plaintiff's title, and the plaintiff must recover on the strength of the TITLE SHOWN.

MR. STUART presented the Instructions asked by the Defendants, as follows :

#### DEFENDANTS' POINTS.

The counsel for the defendants request the Court to charge the Jury—

I. That if they believe from the testimony, that at the time of the survey of the fractional section upon which the sand-bar (so called), at the mouth of Chicago River, was situated, the waters of said river discharged themselves into the lake where the south pier now is, and at the point which in the government survey, and upon the plat by which the land was sold, is designated as the mouth of the Chicago River—and that the said sand-bar was south of that point, and of the *then* mouth of the river—then it could be no part of the north fraction of section ten, and did not pass to the grantors of the plaintiff, unless it further appears, to the satisfaction of the jury, that the sand-bar had been both gradually and imperceptibly washed away, and in like manner re-formed by the action of the waters of the lake, *after* said survey, and *before* it became the property, by pre-emption, of the grantors of said plaintiff.

II. That if the sand-bar were washed away and re-formed in that manner—or if in any way, it was a part of the north fraction of section ten (10), which became the property of the grantors of the plaintiff, yet if afterwards, by the gradual and imperceptible wearing away by the action of the waters of the lake, it was worn or carried off, and the place where it had been became a part of the bed of Lake Michigan, and an open roadstead for boats, rafts, and vessels to pass and re-pass and ride at anchor, and so remained for a period of years, and until it came into the possession of the defendants, *then* the title of those under whom the plaintiff claims, was lost and ceased to exist, and he can have no right to recover in this action.

III. That if the said sand-bar was carried away by sudden avulsion in part, and in part by the gradual and imperceptible action of the waters, then it is the duty of the plaintiff to show *what part* was so suddenly carried away, and *what part* was carried away, gradually and imperceptibly, and that his right to reclaim, can extend only so far, as it appears to the satisfaction of the Jury,



that it was suddenly carried away—and to the portion or part or tract of land so carried away, and no further—and that if such part cannot be distinguished and marked out, then there can be no recovery in this action by the plaintiff.

IV. That if the Jury are satisfied from the testimony in the case, that Cyrus McCormick, the grantor of the plaintiff to a portion of the premises claimed, was aware that the defendants were negotiating with the Government for a portion of the land in question, by him since conveyed to the plaintiff, and of the purchase thereof, and gave no notice of his claim to said property, the same being in the possession of the Government, and by it delivered to the defendants; and if he afterwards, for years, saw and knew that the defendants were in possession, and were expending large amounts of money thereon, and erecting permanent and substantial structures thereon, believing that they had a good title to the same, and never notified them in any way of his interest claimed therein—*then*, both he and his grantee, the present plaintiff, are *estopped* from setting up any claim thereto, and for such portions of the demanded premises, the said plaintiff is not entitled to recover in this suit.

V. That if the jury believe, from the evidence, that the grantors of the plaintiff were aware of the washing away of said sand-bar, and that the place where it had formerly been had become an open roadsted, and a place for vessels, boats and rafts to lay and anchor, and pass and repass; and that subsequently the government of the United States laid out the Fort Dearborn Reservation into city lots, bounding all of those fronting on the water upon Lake Michigan, and sold them as so fronting, and as riparian lots upon said lake, and that said lots have been since sold, from time to time, with such riparian rights, and occupied and built upon, and used as such, and that the owners thereof have been, for a period of fifteen years, subject to all the dangers and hazards of riparian ownership, and subject to expenses to defend themselves against the waters of the lake—that then the grantors of the plaintiff and the plaintiff himself must be considered as having abandoned and dedicated the land where said sand-bar was, to the public, as an highway, and is *estopped* from now setting up a title thereto, and cannot recover in this action.

VI. That if the jury believe that the meanderings of Lake Michigan, on the east side of fractional section ten, (describing said fractional section as bounded upon Lake Michigan) ran up to the point which is now the mouth of the river, to the point in said survey, designated there as to the mouth of the river, and thence across the place there designated as the mouth of the river, and thence up the lake shore, that then the said sand-bar might not be included in the grant to Kinzie by the Survey, Field Notes and Plat, even though the sand-bar were there at the time of the survey, and even though it were not separated from it by the waters of the river running through it, or out where they now do ; that when the description of boundaries by the field notes and monuments is repugnant to the description contained in a plat referred to by them, the jury must adopt that description which is, in their judgment, most certain and definite, and reject that which is repugnant to it.

MR. WILLS proceeded to argue the case to the Court and Jury : without concluding, he gave way, and the Court adjourned until to-morrow morning.

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TENTH DAY — SATURDAY, NOV. 19, 1859.

Court met at nine o'clock.

MR. WILLS resumed and concluded his argument.

Court adjourned until Monday morning at ten o'clock.

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ELEVENTH DAY—MONDAY, NOVEMBER 21, 1859.

Court met at ten o'clock.

MR. LARNED addressed the Court and Jury, arguing the case on behalf of the plaintiff, occupying the entire day.

Court adjourned until nine o'clock to-morrow morning.



TWELFTH DAY—TUESDAY, NOV. 22d, 1859.

MR. BECKWITH, for the Defence, delivered his argument to the Court and Jury, when Court adjourned.

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THIRTEENTH DAY—WEDNESDAY, NOVEMBER 23d, 1859.

MR. JOY, for the Defence, argued the case, occupying the entire day ; when Court adjourned until Friday morning—to-morrow being Thanksgiving day.

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FOURTEENTH DAY—FRIDAY, NOV. 25th, 1859.

MR. JOY proceeded with, and concluded, his argument, and was followed by MR. McLEAN for the Plaintiff.

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FIFTEENTH DAY—SATURDAY, NOV. 26th, 1859.

MR. McLEAN proceeded with his argument.

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SIXTEENTH DAY—MONDAY, NOV. 28th, 1859.

MR. McLEAN concluded his argument, and presented the following additional instructions, asked by the Plaintiff :

PLAINTIFF'S ADDITIONAL POINTS.

The counsel for the Plaintiff also ask the following additional instructions to the jury, viz :

XV. That if the jury believe, from the evidence adduced, that any portion of the surface of the said tongue of land was destroyed suddenly and visibly, and that other portions were destroyed gradually and imperceptibly, from moment to moment ; and if, from the evidence, they shall be unable to distinguish and designate the quantity and locality of

the several parts of its surface, which may have been carried off gradually and imperceptibly, from those parts carried off suddenly and violently ; the defence, as to such parts, must necessarily fail, from want of evidence to identify the parts so lost, and the plaintiff will be entitled to recover the whole.

XVI. That if the jury, from the evidence adduced, shall find that the greater part of the surface of the tongue of land, called the sand-bar, was destroyed and removed suddenly and violently, from time to time, by successive storms on the lake, in consequence of the construction of the piers for the new harbor ; but shall also find that in the intervals between those storms, in calm weather, and also during the progress of each successive storm, there was a gradual and imperceptible destruction or loss of the "*surface of the sand-bar*," which could not be perceived by the eye, from moment to moment, and cannot now be defined by the jury ; still, if the predominant character of the loss of the surface, as a whole, was sudden and violent, the jury will be justified in finding, that the loss of the whole surface was sudden and violent.

XVII. That the terms *sudden*, *visible*, and *violent*, should receive a reasonable application to the facts of the case ; and that if, on the whole, the jury should believe, from the evidence, that the surface of the "sand-bar" was in the greater part destroyed suddenly and violently, and that such was the prevailing manner of its destruction, the fact that portions of its surface may have been destroyed and carried off gradually and imperceptibly, would not change the character of the loss, as a sudden, visible, and violent one, within the legal meaning of those terms ; and that in such case, the plaintiff would not lose his title to the *situs* or sub-surface of the "sand-bar."

XVIII. That it is not necessary, in order to constitute a sudden, visible, and violent loss of surface, by the action of storms, within the legal meaning of those terms, that such loss should have been seen by any witness, or have been visible at the moment of its occurrence, or immediately thereafter ; but that if after the subsidence of such storms, the extent of the losses caused thereby was then visible and appreciable, such losses should be deemed sudden, visible, and violent, within the legal meaning of those terms.

Court took a recess until half past two o'clock.



## AFTERNOON, SESSION.

Court met at three o'clock, and Judge DRUMMOND proceeded to charge the Jury as follows :

## JUDGE DRUMMOND'S CHARGE TO THE JURY.

GENTLEMEN OF THE JURY :—It now becomes the duty of the Court, to instruct the Jury on the law applicable to this case.

Upon one question of law involved in the case, as is known, there was a difference of opinion between the judges at the former trial of this case. That difference of opinion still exists, upon only one material question in the case. In such a cause as this, it was the right of the Presiding Judge of this Court to instruct the Jury upon the law, as he considered it. It would have been my pleasure to acquiesce in those instructions, knowing, of course, that this case was subject to revision by the Supreme Court of the United States, and that any error committed here might be corrected there, whether the instructions were given by him or myself.

This right, which belonged to my brother Judge, from considerations and motives which are known to him, to me, and to the counsel on both sides in this case, he has waived; and has requested that I should instruct the jury in this case, upon the law, as I understand it ; and he acquiesces in these instructions—the object being, on his part as well as on mine, that there should be a decision on the rights of these parties, by the highest judicial tribunal of the nation. In order to accomplish that, it is necessary that the case should be decided here. With these preliminary remarks, the Court will now proceed to instruct the jury :

This is an action of ejectment, and the point to be determined is, whether the plaintiff has made out a title to the land in controversy. He claims through Robert A. Kinzie. Kinzie claimed the north fraction of section 10, town 39 north, range 14 east, under the pre-emption law of 29th of May, 1830. The land was north of the Chicago River, and had Lake Michigan on the east. Kinzie proved up his pre-emption, at the land office in Palestine, in May, 1831, and paid the purchase money ; but Congress had, prior to that time, divided the land district, and in May,

1831, Palestine was not the proper land-office to prove up the pre-emption. The act of Kinzie and of the land-officers at Palestine was, therefore, illegal, and their certificate of entry gave no title to Kinzie. He, however, from that time treated the land as his own, and in February, 1833, he laid a portion of it off into town lots, and, as is insisted by the plaintiff, that part in controversy in this case.

By the act of Congress, of July 1, 1836, entries of the character of Kinzie's were confirmed, and patents were to be issued therefor as in other cases. A patent accordingly issued to Kinzie, on the 9th of March, 1837. There can be no reasonable doubt, I think, that this title, thus perfected, related back to the entry of Kinzie, in May 1831, and the law gave it effect from that date, precisely as if it had been made in the proper land office.

The land had been surveyed in 1821, and on the plat of the Government survey, the North fraction of section 10 is represented as having the Chicago river on the South, and Lake Michigan on the East. The river is represented as flowing out in nearly a straight line into the lake. The fact seems to be, that from 1816 to 1821, the river, instead of flowing out as represented on the survey, just before it entered the lake, made a sharp curve to the South, and thereby formed a sand-bar, or spit of land, between it and the lake, which has given rise to this controversy. This sand-bar existed in 1821, but it is not noticed in the plat of the survey. In 1821, the river seems to have run into the lake, according to the plat, but it is said this was in consequence of an artificial channel cut through the sand-bar. This channel was stopped up in the winter of 1821-2, but was opened again in the spring of 1822, by a freshet, and water continued to flow out there in the summer of 1822, but during 1821 and 1822 more or less water passed from what had been the mouth prior to 1821. After 1822, the direct channel was stopped up, and, with an occasional exception, caused by the act of man, or by a freshet, the river flowed into the lake up to 1833, in its original and natural bed. In 1833 and in 1834, the government constructed piers across the sand-bar, and the river from that time has flowed through those piers, the old channel south of the pier having ceased to bear the water to the lake, because the south pier was run across it, as well as across the sand-bar. In the construction of the piers, the government of the United States did not purchase or condemn the land,



but Kinzie seems to have acquiesced in the act, and, indeed, as already stated, it was not till 1836, that Kinzie's title was confirmed.

Under this state of facts, the substantial truth of which is not denied, the land of Kinzie, covered by his entry and purchase, would be the tract within the following boundaries, as they existed at the time of the entry, (there being no question made but that the government plats, by which sales were made, show that the whole land north of the river, and south of the north line of the fraction, were sold as one parcel,) the north line and west line of fractional sec. 10, according to the public survey, and the Chicago river, and Lake Michigan as they then existed. That is, it would include all the dry, firm land there was at that time, between the west line of the section and the lake, and the north line of the section and the river. The river, the lake, and the two lines of the fractional sec. 10, constituted the boundaries. Whether the land in controversy was within these boundaries, is a fact to be found by the jury, depending upon the evidence before them.

As has been stated, Kinzie acquiesced in the construction of the piers, and if so, the jury, after the lapse of so many years, may presume a dedication of the channel of the river thus formed, the piers and whatever was necessary to accomplish the object of their construction, to the use of the public. This, as I understand, is conceded by the counsel of the plaintiff.

At the time the piers were constructed, the sand-bar extended for some distance from the south pier, in a southerly direction, and east of the old bed of the river. Immediately after the piers were put down, land began to form and increase, by the action of the water, on the north side of the piers; and the sand-bar, south of the piers, also began to wear away, until it almost entirely disappeared beneath the waters; and the lake, extending over the sand-bar and old bed of the river, began to encroach on the main bank. The witnesses do not all agree as to the time it took to accomplish this, but the general statement is, somewhere about 1838 or 1839.

If the sand-bar south of the piers was included within, and formed a portion of, the land purchased of the government by Kinzie, then the construction of the harbor did not divest Kinzie or his grantees of the title, without their

consent or acquiescence ; and if the old bed of the river ceased to be used as a public highway, and became dry land, then the riparian owners would hold to the centre of the river, upon the principle of alluvion.

The general rule, as to the rights of property bounded on a great body of water like Lake Michigan is, that he who owns on the Lake goes to low water mark. The evidence in this case shows, that the lake rises and falls several feet, and that land, at one time overflowed, is at other times, and for a series of years, left bare. The reason of the thing would therefore seem to be, that the owner's title would extend to the water. The bed of the lake, covered by water, belongs to the public, or to the government. The ownership, or absolute title to land implies, not only the right to the surface of the tract, but the substratum, and includes, of course, all that is beneath the surface, as mines or other things.

But the fact that land is bounded or washed by a great body of water, like Lake Michigan, gives rise to rules and principles in the law of real property, which are peculiar to such a condition of things. It has been settled for ages, in the law of all civilized nations, that, unlike an ordinary case, the boundary of a man's land so situated may change; that from necessity and natural equity and justice, his title may be most materially affected by the action of the water. If the law is, that the boundary of the riparian owner extends to the water, then there is always a line which is a common boundary to the private owner, on the one side and the public on the other, and it is manifest, if this water line varies, the boundary may also vary. The shore proprietor takes the chances of his position—the advantages and the risks. Among the former is the possibility of his land being increased by alluvion ; among the latter, of being diminished by decrections—each caused by the action of the water. If accretions are gradually formed upon the lake shore, the owner acquires them, and not only the surface deposited by the water, but he becomes the absolute owner of the substratum, the land or soil, mines, or whatsoever else there may be, beneath the particles deposited by the water. If, on the other hand, the water gradually and imperceptibly encroaches upon his land and wears it away, and thus masters what was once dry land, and it becomes the bed of the lake, then the owner



not only loses the surface of the soil, but his title ceases to what has now become the resting-place of the waters of the lake. If this is not so, what is the meaning of all the authorities, including that of the Supreme Court of the United States, when they declare, that as the riparian proprietor is subject to *loss*, he shall have the *gain* of alluvion? How can he be subject to loss, except of title to his land? It is impossible to suppose that they mean merely the loss of the few particles of superstratum, which are removed by the water.

The principle, however, as I understand it, proceeds upon the ground of acquiescence in the owner, whether public or private. I suppose if the water is gradually filling up, by its action, a harbor or great public highway, the government has the right to remove, from time to time, the deposits, which threaten to impair its usefulness; and so the private owner may resist and oppose, by every means in his power, the encroachments of the water upon his land, however gradual they may be; and yet, in either case, if there is an acquiescence for a long time, say for a series of years, in the results brought about by these natural causes, the public, in the one case, loses the title to what was once the bed of the lake, and the private person, in the other, to what was once firm, dry land, and of which he had been the absolute owner. It is not more unreasonable or unphilosophical, that a title to land should be washed *off* by the action of the water, than that it should be washed *on* by the same operating cause.

These being my views of the law of this part of the case, it remains to make an application of it. The placing the piers there did not, in my opinion, change the principles of law which have been stated. The riparian owners still took their chances of increase or diminution. The effect or consequence of the construction of the piers was, that land was formed on the north and worn away on the south side; but being there, natural causes, modified or affected, it may be, by them, brought about the results which we now know. It follows from what I have said, that if the gain on the north and the loss on the south side were caused gradually and imperceptibly by the action of the water, my opinion is, that in the one case the owner acquired, in the other lost, title to land, if there has been an acquiescence for a series of years, by the public in the gain, and by the private owner in the loss.



It is, then, a matter of fact, which I shall leave to the jury—if they find that Kinzie was the owner of this sand-bar—whether it was washed away gradually by the action of the water, and if so, to what extent; if they find from the evidence, that this bar was washed away gradually and imperceptibly by the water of the lake, and that what was the sand-bar became the bed of the open lake, and so continued for a series of years; that the owners of it did not resist the action of the water, but permitted it to remain for seven years, and more, an open roadstead, then I think that the title to that portion of the sand-bar, so washed away, and so covered with water, had become vested in the public, and that the plaintiff cannot recover such portion, in this action, under the conceded facts in the case. If, however, you should find it was not so washed away and so continued, then the plaintiff may recover.

If you should find that a portion of the sand-bar was not washed away at all, then of course, this principle would not apply, but it would depend entirely upon the fact whether the plaintiff has shown title to such portion.

It is necessary, in order to avoid misapprehension, that an explanation should be made of the terms *gradual and imperceptible*, as used in these instructions. A gradual and imperceptible washing away means that change, which was going on, on the shore of the lake, and which could not at any particular time be seen or measured. The meaning is not, that a change cannot be noticed between different intervals of time, but it cannot be seen *as it occurs*. It was not necessary in order to be gradual and imperceptible, that there should always be the same degree of change in the same time. Some of the authorities say, that it means the change which cannot be observed at any one moment of time.

It would seem to be a sound principle, that if the plaintiff has shown title to the sand-bar in Kinzie and his grantees through whom he claims, it devolves upon the defendants to make out the title to be gone, if they rely simply upon its submersion by the Lake.

As I think the point—whether the sand-bar was carried away gradually and imperceptibly by the action of the water or not—as it may be found by the jury, must substantially rule the material matters in dispute in this case, it is perhaps unnecessary to advert to some other questions



which are referred to in the instructions asked on both sides.

As I understand, upon the proof before the jury, the plaintiff has whatever title to the sand-bar Kinzie had (if any,) or his grantees. I would ask the defendants' counsel whether they make any point on that?

MR. JOY.—We make no point on that, your Honor

JUDGE DRUMMOND.—There can be no doubt, if the jury believe the evidence, that the defendants had notice, as well constructive by the records as actual by information to them, of the claim of Kinzie and his grantees, before they (the defendants) took possession.

So that the case turns mainly upon the points—

*First*—Had Kinzie a title to the sand bar?

*Second*—Has that title, if it ever existed in him or his assignees or grantees, been lost by the gradual and imperceptible action of the Lake; and if so, how much and to what extent.

There seems to be no reasonable doubt, under the evidence, of the position of the sand-bar.

Neither does there seem to be any doubt, that if the grant of the government to Kinzie, covered the sand-bar, and his title passed to his assignees, and so to the plaintiff, that the deeds introduced by the defendants from the Secretary of War, and from the owners of the Fort Dearborn Addition lots, could not convey any land claimed by the plaintiff in this case.

These are all the instructions, gentlemen, that the Court deems it necessary to give you upon the law of this case—with this caution to you: that you are to find your verdict exclusively upon the law and upon the *facts* that are introduced in evidence before you. It is your imperative duty to disregard all outside influences and considerations. This case and this verdict should be determined by the law and by the evidence, and by them *alone*.

JUDGE MCLEAN.—I acquiesce in the charge of my brother Judge, though we differed on one or two points, as to the law of the case.

MR. JOY.—I have a remark, which is personal to myself, that I wish to make to your Honors, if this is the proper time to make it, before the Jury go out—a remark having no direct reference to this case.

JUDGE DRUMMOND.—Yes sir.

MR. JOY.—I observe, may it please your Honors, that some remarks which I have made during the progress of this trial, have been misconstrued, and have been construed as casting an imputation either upon this Court, or upon one of the members of this Court. I wish now, may it please your Honors, to disclaim, distinctly and entirely, ever designing to make any imputation whatever, upon either of the members of this Court.

I doubted for a moment, after what took place this morning, whether I could, with propriety, make this disclaimer; but I have come to the conclusion, that nothing that transpired this morning, shall prevent my doing what I deem a duty to myself and the Court, when I have been misapprehended. That is all I have to say, your Honors.

JUDGE DRUMMOND.—The Court is much gratified in hearing the disclaimer of the gentleman. His remarks were liable to misconstruction.

MR. McLEAN.—If the Court please, in regard to the instructions which we have asked, together with the additional instructions, I wish to ask the Court to pass specifically upon our instructions, in order that we may have the benefit of exceptions to the rulings upon any of them before the Jury retire. I wish to be regarded as having made the exceptions, in the presence of the Jury, to the charge.

JUDGE DRUMMOND.—Certainly, certainly. The Court understands that there have been instructions asked on both sides, and the counsel on either side can except to the Court's refusal to give the instructions asked. The Court has refused to give any of the instructions asked by either party, and has given its own instructions to the jury, deeming those instructions all that are necessary in the case.

MR. McLEAN.—There is another matter, if the Court please, in regard to which I would say a word. The counsel for the defence in this case has made a disclaimer in view of the remarks made by me this morning at the close of my argument. All I have to say in reply, is, that I am exceedingly happy to find that I was so much mistaken in my understanding of the remarks of the gentleman, and I am glad to find that I have done him injustice, in supposing that he could have been guilty of making such an imputation



MR. LARNED.—I understand that the instructions on either side, that are not given, are to be considered and marked as refused ?

JUDGE DRUMMOND.—Yes sir, of course.

The Court passed the written instructions over to the jury, stating to them the form in which the verdict should be rendered, whereupon the jury retired.

After an absence of less than half an hour, the Jury returned, and, being called by the Clerk, passed up the following verdict :

“ We, the Jury, find for the DEFENDANTS.”

JUDGE DRUMMOND.—“ Find the defendants not guilty ;” that is your verdict, is it ?

JURORS —Yes sir. Yes sir Yes sir.

JUDGE DRUMMOND.—Gentlemen of the Jury, the Court will now release you, and the Court wishes to thank you for the punctuality and promptitude with which you have attended during the progress of this prolonged trial. In that particular, you have furnished an example to all jurors.

Court adjourned.

